31761 06706669 6

UNIV OF
TORONTO
LIBRARY

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/manualofconcholo09tryouoft

Zool
Mollusca
T

MANUAL

OF

CONCHOLOGY;

STRUCTURAL AND SYSTEMATIC.

WITH ILLUSTRATIONS OF THE SPECIES.

BY GEORGE W. TRYON, JR.

CONSERVATOR OF THE CONCHOLOGICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

VOL. IX.

SOLARIIDÆ, IANTHINIDÆ, TRICHOTROPIDÆ, SCALARIIDÆ, CERITHIIDÆ, RISSOIDÆ, LITTORINIDÆ.

PHILADELPHIA:
Published by the Author,
ACADEMY OF NATURAL SCIENCES, COR. 19TH & RACE STS.
1887.

14439
17/11/17

Wm. P. Kildare, Printer, 734 and 736 Sansom Street, Philadelphia

MANUAL OF CONCHOLOGY.

MONOGRAPH OF THE FAMILY SOLARIIDÆ.

BY WILLIAM B. MARSHALL, B. S.,
Assistant, Conchological Museum of the Academy of Natural Sciences of Philadelphia.

Family *SOLARIIDÆ.*

Shell depressed conic, turbinate, or planorbiform; aperture entire, angular or subcircular; lip and columella simple, interior without nacre; umbilicus wide and deep and usually with crenulated margins; main sculpture usually spiral. Operculum corneous, spiral.

Animal with very large, oval foot, notched in front; tentacles cylindrical, thick, with eyes sessile on swellings near their outer bases. Dentition variable. In Solarium (Pl. 1, figs. 5, 6) and Philippia (Pl. 1, fig. 8) the teeth are long, spiniform, pronged and without a central tooth. In Torinia (Pl. 1, figs. 11, 12) there is a small central tooth, a lateral tooth with pectinated and incised edge united to the central tooth, and two marginal teeth which are straight and digitated at their extremities. The jaw of Solarium and that of Philippia are figured on Pl. 1, figs. 4 and 7.

The proper systematic position of the family Solariidæ was long a matter of doubt. By most authors it was assigned to the neighborhood of Trochidæ. Gray in 1847 (Zool. Proc., p. 151), substituted for Solarium the name Architectoma, which was evidently a typographical error for Architectonica, Bolt., and placed the genus in the Littorinidæ. In 1850 (Figs. of Moll. Anim.), he raised the genus to the rank of a family, and naming it Architectomidæ, he placed it between the Littorinidæ and Melanidæ. In 1853 (Zool. Proc., p. 394), believing the animal to be without teeth, he placed the family in his group Gymno-

glossa, and H. and A. Ad., naming the family Architectonicidæ, made the same disposition of it. Mörch, likewise, failed to find teeth, and formed for the family a new group to which he gave the name Aglossa (Mal. Blatt., p. 129, 1859).

Dr. Troschel found both teeth and jaws to be present, and remarked the affinities existing between the dentition of the Solariidæ and others of the Ptenoglossa (Archiv. für Naturg., i, p. 91, 1861). This arrangement has been generally accepted, most authors placing Solarium near to Scalaria and Ianthina.

The Solariidæ have been monographed by:—

Hanley (Solarium, Torinia), in Sowerby's Thesaurus Conchyliorum, iii, p. 227, 1866.

Reeve, Conchologica Iconica, xv, Solarium, 1864.

Kiener, Coquilles Vivantes, Solarium.

Philippi, in Küster, Conch. Cab., 1853.

A large proportion of the Solariidæ were first described by Hinds in the Proceedings of the Zoological Society, 1844, and afterwards figured in the Zoology of the Voyage of the Sulphur, Plate 14.

Marquis Monterosato published in 1873 a pamphlet entitled "Notizie Intorno ai Solarii del Mediterraneo," having sixteen pages and one plate.

The genus Adeorbis, Searles-Wood, has been placed in the family Solariidæ by Jeffreys, and a few authors have followed this classification. I have deemed it best to exclude the genus: for a discussion of the proper position of Adeorbis, see Journal de Conchyliologie, p. 166, 1885.

Synopsis of Genera.

FAMILY *SOLARIIDÆ.*

SUBFAMILY *SOLARIINÆ.*

Shell depressed conic, angular at the periphery, umbilicus usually with strongly crenulated margin. Operculum corneous, paucispiral.

SUBFAMILY *TORINIINÆ.*

Shell turbinately elevated or planorbiform, whorls usually rounded, margin of umbilicus slightly crenulated. Operculum corneous, conically elevated or plain, externally spiral of num-

erous volutions, internal face smooth, with a spirally twisted median projection.

Subfamily *EUOMPHALINÆ*.

Shell depressed, planorbiform; whorls rounded, in contact except in Eccyliomphalus, in which they are widely dissolute; spire flattened or involute.

(*Solariinæ*.)

Genus SOLARIUM, Lamarck, 1799.

Shell depressed conic, angular at the periphery; aperture subquadrangular, lip simple; umbilicus with crenulated margins, spiral, wide and perspective.

Animal with large foot, notched in front, and having a very pronounced marginal fold; head large, furnished with two tentacles which are short, thick, cylindrical and folded, with the suture below; eyes on swellings near the outer bases of the tentacles; gill-cavity divided by a longitudinal fold. (Pl. 1, figs. 1, 2).

Architectonica (Bolt. 1798), Gray, is a synonym.

Inhabits warm seas, world-wide. Fossil, more numerous. Eocene.

Subgenus Solarium, Lamarck (restricted).

Surface of the shell strongly and closely sculptured longitudinally, spirally sulcate and ribbed. Operculum corneous, paucispiral, with the nucleus subexcentric.

Solariorbis, Conrad, is a synonym.

Subgenus Philippia, Gray, 1840.

Shell without longitudinal sculpture, spiral sculpture nearly obsolete. Operculum flattened; whorls numerous, with the nucleus subcentral, internal face bearing a subspiral calcareous process. (Pl. 1, fig. 9).

Discolus, Deshayes, 1863, is a synonym.

Genus PLATYSCHISMA, M'Coy, 1844.

Shell depressed, trochiform; whorls somewhat rounded, ornamented with small transverse striæ; spire short; whorls

few; aperture oblique; umbilicus small, rounded, its margins without crenulations.

Fossil, Silurian. *United States; Europe.*

Genus FLUXINA, Dall, 1882.

"Shell porcellanous, depressed conical, umbilicate, strongly carinate, with a stout umbilical rib, above which the pillar is thin and emarginate; from the umbilical rib to the carina the basal margin of the aperture is deeply flexuously emarginate; above the carina it is again but less deeply emarginate, then sweeps forward roundly and then slightly recedes before joining the preceding whorl.

This curious form belongs in all probability to the Solariidæ; representing among them Basilissa among the Trochidæ and recalling Platychisma, but with a different aperture. When perfect the margin at the carina must project forward like a claw, or nail, as in Schizostoma. When adult, the nuclear whorls are filled up with a solid deposit of shelly matter, and it is probable that there is a slight notch at the end of the umbilical rib." *West Indies.*

(*Torininæ*.)

Genus TORINIA, Gray, 1840.

Shell turbinately elevated or in some instances planorbiform; umbilicus typically moderate to wide, perspective, its margins slightly crenulated; lip and columella simple. Operculum corneous, typically conically elevated, externally spiral, of numerous volutions margined by projecting edges; internal face smooth, bearing a spirally twisted, median projection (Pl. 1, fig. 13).

Tropical seas, world-wide. Fossil, Paris Basin.

Subgenus TORINIA, Gray (restricted).

Shell turbinately elevated; whorls rounded, granulated, spirally ribbed; aperture subcircular, lip simple, columella perpendicular and thickened. Operculum typical.

Animal (Pl. 1, fig. 10) with thick, long obtuse tentacles, the eyes situated upon swellings near their outer bases; foot very large in proportion to body and shell, oval, emarginate and auriculate in front.

Heliacus, d'Orb., 1841, and *Teretropoma*, Rochebrune, 1881, are synonyms. *Antilles; Pacific O.; Indian O.*

Subgenus PSEUDOMALAXIS, Fischer, 1883.

Shell discoidal, planorbiform; whorls and aperture quadrangular. Operculum as in Torinia restricted.

Mediterranean; Madeira.

Subgenus GYRISCUS, Tiberi, 1868.

Shell turbinated, conically turriculated, umbilicated; whorls rounded, granulated, spirally sulcate and ribbed; aperture subcircular, the simple margins united by a callous deposit. Operculum externally flat and multispiral, furnished internally with a central styliform process (Pl. 1, fig. 17). *Mediterranean.*

Subgenus EPISCYNIA, Mörch, 1875.

Shell glassy; periphery with a double series of cilia; apex simple, direct. *Cuba.*

Subgenus CLIMACOPOMA, Fisch., 1883.

This subgeneric name was proposed by Dr. Fischer (Manuel of Conchyliologie, Fasc., viii, p. 714) upon grounds purely hypothetical. When Deshayes found in the Paris Basin a fossil operculum having all the characters of the operculum of the recent Torinia, he suggested that perhaps it belonged to *Solarium patulum*, Lam., but never succeeded in finding it in position. Dr. Fischer, anticipating the discovery of such a species, with the shell of Solarium and the operculum of Torinia, has proposed for the discovery, yet to be made, the above subgeneric name.

Genus OMALAXIS, Desh., 1830.

Shell subdiscoidal, flat or slightly concave above; whorls carinated at the periphery; peristome not continuous; umbilicus wide and deep. Operculum multispiral. *Bifrontia*, Desh., 1832, is a synonym. *Coast of New England—Brazil.* Fossil, Eocene.

(*Euomphalinæ.*)

Genus OPHILETA, Vanuxem, 1842.

Shell discoidal, planorbiform; whorls numerous, in contact, very convex. Fossil, Paleozoic. *O. levata*, Hall. *New York.* (Struct. and Syst. Conch., Pl. 65, fig. 19.)

Genus EUOMPHALUS, Sowb., 1814.

Shell depressed, planorbiform; spire plane or concave; inferior face widely umbilicated: whorls in contact, convex at the periphery, superior face carinated. Fossil, Paleozoic.

Genus SCHIZOSTOMA, Bronn, 1835.

Shell discoidal, planorbiform; whorls more or less angulated at the periphery, with a carina above and below; aperture clasping, subtrigonal, lip sinuous, prolonged into a claw. Fossil, Paleozoic. *United States; Europe. S. Puzosii*, Vern. (Struct. and Syst. Conch., Pl. 65, f. 11.)

Genus ECCYLIOMPHALUS, Portlock, 1843.

Shell subdiscoidal, planorbiform; whorls few, rounded above, flattened below, widely dissolute; lip simple. Fossil, Paleozoic, a few species. *E. serpula*, Kon. (Struct. and Syst. Conch., Pl. 65, fig. 20).

Genus SOLARIUM, Lam., 1799.

Subgenus SOLARIUM (restricted).

S. PERSPECTIVUM, Linn. Pl. 2, figs. 18–21.

Umbilical crenulations brown; whorls spirally sulcate below the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus; color purplish ash or light yellowish brown with interrupted or continuous brown bands next the suture and below the upper sulcus and interrupted brown bands on the ribs about the periphery and another near the umbilicus. Diam. 2·5 inches.

Indian O.; Pacific O; China to Australia.

S. trochleare and *S. formosum*, Hinds; *S. zonatum* and *S. incisum*, Phil., are synonyms.

Var. AUSTRALIS, Phil. Pl. 2, figs. 20, 21.

A smaller shell than the typical *S. perspectivum*; color olive-brown with a very light chestnut band at the suture, a white band above and a very dark brown band below the upper sulcus, rib above the periphery with an interrupted reddish brown band, periphery and rib below it spotted with yellow or yellowish brown; umbilical crenulations yellowish or purplish brown.

S. MODESTUM, Phil. Pl. 2, figs. 22, 23.

Umbilical crenulations white; whorls spirally sulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus; color ash-white or brownish with an interrupted brown band near the suture, continuous brown bands below the upper sulcus and on the rib above the periphery, periphery and inferior rib with distant brown spots; base with an interrupted brown band near the umbilicus. Diam. 1·3 inches.

China; Society Is.

Very much resembles *S. perspectivum* and may perhaps be a variety of that species; it differs in the coloring only.

S. PERDIX, Hinds. Pl. 2, figs. 24, 25.

Umbilical crenulations small, white; whorls spirally sulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus, ribs crenulated; color pale brownish ash with bands of distant red-brown spots near the suture, on the ribs about the periphery and near the umbilicus. Diam. 1·3 inches.

Malacca; Ceylon; N. W. Australia.

In general appearance this species very much resembles the young state of *S. perspectivum* but is easily distinguishable by the finely crenulated ribs about the periphery and the small pearl-like crenulations of the rib around the umbilicus.

S. DUNKERI, Hanley. Pl. 2, figs. 26, 27.

Umbilical crenulations white; whorls spirally sulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus, ribs crenulated; color fulvous-drab with interrupted brown bands near the suture, on the ribs about the periphery and near the umbilicus, and with obscure, radiating, interrupted brown blotches. Diam. 1–1·5 inches.

Indian Archipelago.

This species resembles *S. perdix*, but is more plentifully spotted and has obscure, radiating blotches.

S. MAXIMUM, Phil. Pl. 3, figs. 31–34.

Umbilical crenulations white; whorls spirally striated, spirally bisulcate below the suture, ribbed at the periphery, spirally

sulcate and ribbed above and below the periphery and near the umbilicus; color as in *S. perspectivum*, except that the brown band below the upper sulcus is usually wanting.

Diam. 2·5 inches.

Java; Ceylon.

S. Taylori, Hanley (Pl. 3, figs. 33, 34), has somewhat coarser sculpture and a double band of color below the suture, but I agree with Reeve in thinking it to be the same shell as *S. maximum*.

S. QUADRICEPS, Hinds. Pl. 4, figs. 39, 40.

Umbilical crenulations tinged with reddish-brown; sculpture and color as in *S. Taylori*. Diam. 2·5 inches.

Zanzibar; Bay of Panama.

This species is certainly very closely related to *S. maximum*, and is probably identical.

S. PICTUM, Phil. Pl. 3, figs. 35, 36.

Umbilical crenulations white; sculpture as in *S. maximum*; color purple-fawn, with two interrupted bands of reddish-chestnut below the suture, the ribs at the periphery spotted with reddish-chestnut; base with a band of distant, round reddish-brown spots near the umbilicus. Diam. 1·5 inches.

New Guinea.

S. fragile, Hinds, is a synonym. This species is probably identical with *S. maximum*.

S. TRYONI, Marshall. Pl. 2, figs. 28, 29.

Umbilical crenulations white; whorls spirally bisulcate below the suture, ribbed at the periphery, spirally sulcate and ribbed above the periphery and near the umbilicus, ribs crenulated; surface of the shell covered with radiating, almost direct, impressed growth-lines; color light purplish chocolate, with an interrupted chestnut band on the space between the suture and the upper sulcus, another very narrow band just below the upper sulcus, none of the spots reaching to the second sulcus, a band reaching from the periphery beyond the rib above it and changing from orange-yellow on the periphery to chestnut above; base with the rib of the periphery elevated and an interrupted band of orange-brown near the umbilicus. Diam. 1 inch.

? Moluccas.

This shell, which is just approaching maturity, has the color and sculpture of the upper surface very much like to that of *S. maximum*. The distinguishing characteristics are the basally projecting rib of the periphery and the absence of the usual rib and sulcus below the periphery.

S. REGIUM, Hanley. Pl. 2, fig. 30.

Umbilical crenulations white; whorls spirally bisulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus; color purplish flesh, with an interrupted chestnut band spreading from the suture beyond the second sulcus, one on the rib above the periphery and a very fine interrupted band just above the rib.

Diam. 1·2 inches.

Habitat unknown.

In sculpture this species resembles *S. quadriceps;* the color bands are its chief characteristics.

S. PURPURATUM, Hinds. Pl. 4, figs. 41, 42.

Umbilical crenulations pale fuscous; sculpture as in *S. maximum;* color dark purplish ash with a double band of chestnut near the suture, periphery and the superior rib plentifully blotched with duplicated brown spots; base slightly convex, plentifully marked with radiating reddish brown streaks.

Diam. 1·5 inches.

Moluccas.

S. stellatum, Phil., is a synonym.

This species differs from *S. maximum* in the darker color, the duplicated spots, the more convex base and the fuscous crenulations of the umbilicus.

S. GRANULATUM, Lam. Pl. 5, figs. 53, 54.

Umbilicus contracted, crenulations very strong; whorls spirally sulcate with four principal sulci and traces of others. the impressed growth-lines of the spire breaking the surface into coarse granules; color purplish ash or livid flesh, with a band of distant yellowish brown spots next the suture and a few light spots sprinkled over the surface; base many ribbed and crenated, ribs specked with yellowish brown. Diam. 2 inches.

North Carolina to West Indies;
Panama to L. California.

Solarium perspectivum, Chemn. (in part), is a synonym. Hinds, in the "Voy. of the Sulphur," erroneously gives Asia as the habitat of this species.

S. VERRUCOSUM, Phil. Pl. 3, figs. 37, 38.

Umbilicus contracted, crenulations white, very strong; whorls spirally sulcate and, in the spire, granose; color yellowish cream with interrupted bands of chestnut-red below the suture, at the periphery and above and below the middle of the whorl; base many-ribbed and crenated, ribs specked with yellowish brown. Diam. 1–2 inches.

West Indies.

S. nobile, Hanley, is a synonym.

This species is probably synonymous with *S. granulatum*.

S. LÆVIGATUM, Lam. Pl. 4, figs. 43, 44.

Umbilicus narrow, crenulations white or cream color; whorls smooth, spirally quadri-sulcate, ribbed above, on and below the periphery and near the umbilicus; color pinkish-purple plentifully sprinkled with yellowish-brown; base with fine, revolving interrupted orange-brown lines and plentifully blotched near the periphery with the same color. Diam. 1–1·5 inches.

India.

Easily distinguished by the pinkish-purple color, the smoothness of the shell, the four spiral sulci and the fine revolving orange-brown lines on the base.

S. REEVEI, Hanley. Pl. 4, figs. 45, 46.

Shell very conoidal; umbilicus rather narrow, with white crenulations; whorls spirally unisulcate or bisulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus, ribs finely crenulated, entire surface of the shell covered with close, obliquely radiating growth-lines; color pinkish-flesh with interrupted orange-brown bands below the suture, on the ribs about the periphery, and finer bands near the middle of the whorls. Diam. 1 inch.

Australia.

Easily distinguished by the fine crenulations of the narrow umbilicus, the very conoid shape and the fine sculpture. Reeve has suggested that this species may be an Australian dwarf

variety of *S. lævigatum:* The two species agree in general shape, in the narrow umbilicus and in the general color, but in *S. lævigatum* the main sculpture is spiral while in *S. Reevei* it is longitudinal.

S. FULIGINOSUM, Hinds. Pl. 4, figs. 47, 48.

Umbilical crenulations reddish-brown; whorls spirally sulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus; color livid-white with obliquely radiating dusky-brown blotches and interrupted brown bands near the suture, on the ribs about the periphery and near the umbilicus. Diam. 2 inches.

Habitat unknown.

S. maculatum, Reeve, and *S. Hanleyi*, Sowb. (Pl. 5, figs. 55, 56), are synonyms; the type of the latter is a deformed specimen in which the base is very convex. This species is easily distinguishable by the radiating brown blotches.

S. CUMINGII, Hanley. Pl. 5, figs. 57, 58.

Umbilical crenulations tinged with reddish-brown; whorls spirally sulcate near the suture, ribbed at the periphery, spirally sulcate and ribbed below the periphery and near the umbilicus; color livid-yellowish with obliquely radiating, interrupted reddish-chestnut blotches and light chestnut bands at the suture, on the ribs about the periphery and near the umbilicus. Diam. 1·5 inches.

Habitat unknown.

This species differs from *S. fuliginosum* in having the blotches of a lighter color and interrupted and in the absence of a distinct rib above the periphery. It is perhaps only a variety.

S. BAIRDII, Hanley. Pl. 4, fig. 49, 50.

Whorls with radiating growth-lines broken into five series by spiral sulci, periphery ribbed, spirally sulcate and ribbed below the periphery and near the umbilicus, ribs crenulated; color pale-fulvous with remote obscure spots. Diam. 20 mill.

Habitat unknown.

S. PLACENTULA, Hinds. Pl. 4, fig. 51, 52.

Shell discoid, very depressed; whorls smooth, regularly spirally striated, broadly ribbed at the periphery, spirally sulcate

and ribbed near the umbilicus, ribs crenulated; color pale-fulvous with distant reddish brown spots on the periphery; base slightly concave near the periphery, somewhat swollen near the middle. Diam. 12–25 mill.

Bay of Magdalena, L. California.

This species is remarkable for the absence of a sulcus below the suture, and ribs above and below the periphery.

S. IMPRESSUM, Nevill. Pl. 4, figs. 52, *a b.*

Umbilical crenulations white; whorls 5, granosely shouldered, obsoletely spirally ribbed, ribs four or five, minutely granose, periphery roundly angular; color glassy white, with obliquely radiating patches of chestnut, or of a uniform reddish; base very convex, with two impressed spiral lines and an interrupted brown band near the umbilicus, umbilical wall obsoletely spirally ribbed; aperture subquadrangular. Diam. 6 mill.

Ceylon.

Unfigured and Doubtful Species.

S CALCAR, Costa.	*Mediterranean.*
S. WROBLEWSKYI, Mörch.	*Rio Janeiro.*
S. KREBSII, Mörch.	*Porto Plata; Curaçao.*
S. TRICARINATUM, Stearns.	*West Indies.*
S. VALENCIENNESII, Mörch.	*Realjo.*

Subgenus PHILIPPIA, Gray, 1840.

S. HYBRIDUM, Linn. Pl. 5, figs. 59–62.

Umbilicus contracted, crenulations white, very strong; whorls smooth, ribbed at the periphery, spirally sulcate, and ribbed above and below the periphery and near the umbilicus; color varying shades of reddish brown with patches of white; base very convex, usually of lighter color than the upper surface. Diam. 20 mill.

Philippines; Java; Australia; Ceylon.

S. Layardi, A. Ad., and *Trochus perspectivunculus*, Meusch., are synonymous.

Var. UNDATUM, Hanley. Pl. 5, fig. 61, 62.

Color white, with narrow, radiating, undulating, reddish blotches; base with alternating bands of yellowish brown and white.

Var. AUSTRALIS, Hanley (unfigured).

Tawny brown or reddish brown color, either with spiral lines of a darker color or banded above with small, close, white spots and below with angulated white spots; base and apical whorl with spiral light and dark lines of color.

S. CINGULUM, Kiener. Pl. 5, figs. 63, 64.

Umbilicus contracted, crenulations white, very strong; whorls regularly, spirally striated, ribbed at the periphery, spirally sulcate and ribbed above and below the periphery and near the umbilicus; color white, upper part of the whorl yellowish-brown with rays of the same color descending to the periphery; base slightly convex and of a pale-smoky color. Diam. 1 inch.

Sandwich Is.; Fiji Is.; Philippines.

This species is easily distinguished by the scalloped white band above the periphery. The shell differs from *S. hybridum* in the coloring and in the less convex base, but is probably only a variety of that species.

S. OXYTROPIS, A. Ad. Pl. 5, figs. 65, 66.

Shell depressed, umbilicus wide; whorls smooth, plane, ribbed at the periphery, spirally sulcate and ribbed above the periphery and near the umbilicus; color white, glassy, ornamented with yellowish brown; base convex. Diam. 13 mill.

New Caledonia.

The type of this species which has been considered by Hanley to be a young specimen of *S. hybridum*, differs from that form in being quite depressed, in the widely open umbilicus, and in the absence of a rib below the periphery.

S. PSEUDOPERSPECTIVUM, Brocchi. Pl. 5, figs. 67, 68.

Shell very depressed; umbilicus rather narrow; whorls planulate above, having three nearly obsolete moniliform raised bands, ribbed at the periphery, spirally sulcate and ribbed near the umbilicus; base slightly concave near the periphery, convex in the middle. Diam. 1·4 inches.

Mediterranean, Naples.

S. perspectiviforme, Tiberi; and *S. discus*, Phil., are synonyms.

S. MEDITERRANEUM, Monts. Pl. 5, figs. 69, 70.

Whorls 4–5, smooth, rapidly increasing, ribbed at the periphery, spirally sulcate and ribbed above the periphery and near the

umbilicus; color fulvous; base with numerous concentric impressed lines; aperture subpyriform. Diam. 1 inch.

Mediterranean.

S. pseudoperspectivum of authors (not Brocchi), is a synonym, to which may be added *S. sulcatum*, O. G. Costa, 1841 (not of Lamarck, 1822), and *S. pulchellum*, Tiberi, 1868 (not of Michelotti, 1841).

S. LUTEUM, Lam. Pl. 5, fig. 71, 72.

Umbilical crenulations white; whorls few, somewhat rounded, ribbed at the periphery, spirally sulcate and ribbed below the periphery; color yellowish with bands of very fine brown dots below the suture, and on the ribs about the periphery; base slightly convex, spirally striated; aperture subrotund.

Diam. 7·5 mill.

Australia.

S. CONULUS, Weinkauff. Pl. 5, fig. 73, 74.

Shell conical; umbilical crenulations white; whorls few, rounded, ribbed at the periphery, spirally sulcate and ribbed below the periphery; color brownish-yellow, the ribs at the periphery obscurely spotted with white; aperture subrotund. Diam. 13 mill.

Mediterranean.

S. hybridum, Monts. and Petit (not Linn.), is a synonym.

This species, which many authors include in the synonymy of the preceding, differs from it in being more elevated, in the darker color, in the absence of the band below the suture and in the obscure banding of the ribs about the periphery.

Genus FLUXINA, Dall, 1882.

F. BRUNNEA, Dall (unfigured). *West Indies.*

SUBFAMILY *TORINIINÆ.*

Genus TORINIA, Gray, 1840.

Subgenus TORINIA (restricted).

T. VARIEGATA, Gmelin. Pl. 5, figs. 75–79; Pl. 1, figs. 14–16.

Shell depressed or conically elevated; whorls longitudinally striated, spirally sulcate and ten-ribbed, that on the periphery and the one below it being the strongest; color radiating, alter-

nate, stripes of white and brown; margin of umbilicus crenulated, umbilical wall with a crenulated, medial rib.

Diam. 10–17 mill.

Red Sea; Indian O.; Pacific O.

T. gyra, Meusch.; *T. areola*, Gmel.; *T. perspectiviuncula*, Dillwyn, and *T. tesselata*, Desh., are synonyms.

Var. DEPRESSA, Phil. Pl. 5, figs. 78, 79.

Shell very depressed; color white with radiating brown streaks, interrupted white bands on the strong ribs about the periphery, umbilical crenulations and surrounding portion of the base white.

Var. PLANULATA, Hanley. Pl. 5, fig. 77.

Shell very depressed; color brownish, with interrupted white bands above the suture and on the two strong ribs about the periphery.

In the American Journal of Conchology (vol. v, p. 81, 1869), W. H. Pease states that the operculum of *T. variegata* from the West Coast of America, differs widely from that of the same species from Hawaii and the East Indies. He thus describes it: "It is composed of plates disposed in the shape of a screw, of three whorls. The plates are wide apart, and furnished on their edges with short, stout bristles and the sides reticulated with raised striæ" (Pl. 1, fig. 14–16). I have examined specimens of the West Coast species, kindly loaned by Dr. Robert E. C. Stearns, of the United States National Museum, and am unable to verify Mr. Pease's statement, the opercula being normal.

T. DORSUOSA, Hinds. Pl. 5, figs. 80, 81.

Shell depressed; whorls longitudinally striated, spirally sulcate and ten-ribbed, the rib on the periphery and that below it being strongest; color reddish brown, confusedly blotched with white, the two stout ribs about the periphery with interrupted white bands; umbilicus moderate, crenulated, umbilical wall with a spiral medial rib. Diam. 13 mill.

Pacific Islands.

T. CYLINDRICA, Gmelin. Pl. 5, fig. 82.

Shell conic, elevated; whorls longitudinally striated, spirally sulcate and ten-ribbed, the three ribs about the periphery being strongest; color chestnut-brown, sparingly mottled with white

at the periphery and above the suture; margin of umbilicus slightly crenulated, umbilical wall with three spiral ribs.

Alt. 13–18 mill.

West Indies.

T. Heberti, Desh.; *T. cyclostoma*, Hanley; *T. cylindracea*, Dillwyn, are synonyms.

T. CYCLOSTOMA, Menke. Pl. 5, fig. 83, 84.

Sculpture as in *T. cylindrica*; color greenish black, with interrupted white bands above the suture and on the periphery; umbilical wall with two or three spiral ribs. Alt. 13 mill.

West Indies.

T. Æthiops, Hanley, is a synonym.

This species differs from the preceding in coloring, but is perhaps only entitled to varietal rank.

T. ÆTHIOPS, Menke. Pl. 5, figs. 85, 86.

Shell globose, conic; whorls longitudinally sulcate, spirally sulcate and ribbed, the three superior ribs the smallest; color greenish black with interrupted white bands above the suture, on the periphery and on the rib below it, and a brownish white band in the aperture; umbilical wall with two spiral ribs.

Alt. 10 mill.

West Indies.

Easily known by the globose shape, the banding, the two ribs on the umbilical wall and the whitish band in the aperture.

T. NUBILA, Menke. Pl. 5, fig 86 *a*.

Shell globose-conic; whorls eleven-ribbed, sulci punctate, color whitish, the middle of the whorls with smoky brown spots; umbilicus moderate, umbilical wall with three or four spiral ribs.

Alt. 10 mill.

West Indies.

T. TROCHOIDEA, Desh. Pl. 5, figs. 87, 88.

Shell conic; whorls longitudinally striated, spirally sulcate and ten-ribbed, rib at the periphery elevated, very strong, granular; color grayish white; margin of umbilicus crenulated, umbilical wall with two spiral ribs. Alt. 20 mill.

Manilla; Society Islands.

T. dealbata, Hinds, is a synonym.

T. MIGHELSI, Phil. Pl. 6, figs. 89, 90.

Shell convex; whorls 4–5, longitudinally striated, obsoletely spirally sulcate and ribbed, periphery strongly sulcate, suture profound; color grayish ash throughout; umbilicus rather open, its margin slightly crenulated, umbilical wall with or without spiral ribs. Diam. 8–12 mill.

Sandwich Islands.

It is *T. cyclostoma*, Migh. (not Menke).

T. DILECTA, Desh. Pl. 6, figs. 91, 92.

Shell discoidal, slightly convex; whorls 6, longitudinally striated, spirally sulcate and ribbed, granular, periphery strongly ribbed, suture distinctly channeled; color tawny; umbilicus very wide, with a crenulated rib at the border.

Diam. 12·5 mill.

Isle of Bourbon.

T. STRAMINEA, Gmel. Pl. 6, figs. 93–96.

Shell convex; whorls longitudinally striated, spirally sulcate and ribbed, ribs broad and flat, suture profound; color uniform yellowisl brown; umbilicus wide, ribbed at the border, rib crenulated, umbilical wall with or without spiral ribs.

Diam. 1 inch.

Tranquebar; Philippines; New Guinea.

T. fulva, Hinds, is a synonym.

Var. SICULA, Cantr. Pl. 6, figs. 95, 96.

The older authors gave the East Coast of Africa as the habitat of *S. stramineum*, but afterwards a smaller shell agreeing with this species in sculpture and color, and differing only in size, was found in the Mediterranean and identified by Philippi (Enum. Moll. Sicih., i, p. 173) as the same shell. Cantraine considering the difference in size and the widely separated habitats has made the Mediterranean shell a distinct species, and named it *T. sicula*. At the best Cantraine's species is but a variety, of which *T. fallaciosa*, Tiberi, is a synonym.

T. INFUNDIBULIFORME, Gmelin. Pl. 6, figs. 97–99.

Shell depressed, convex; whorls rounded, descending slowly, channeled at the suture, longitudinally sulcate, spirally sulcate and ribbed, ribs granular; color uniform brownish; umbilicus

very wide, deeply channeled, umbilical wall spirally ribbed; aperture round, nearly continuous, interior with alternating bands of light and dark brown. Diam. 20 mill.

Philippines; Lord Hood Isl.; Sandwich Is.

T. cylindracea, Hanley (in part); *T. Chemnitzii*, Kien., are synonyms. *T. crenella*, Linn., is possibly the same, but the description is too vague.

Var. STRIGATA, Hanley. Pl. 6, fig. 99.

Periphery and the rib below it ornamented with white and smoky-brown spots.

T. FENESTRATA, Hinds. Pl. 6, figs. 100, 1.

Shell depressed, slightly convex; whorls granular, longitudinally striated, spirally sulcate and ribbed, the three ribs about the periphery being strongest, suture channeled; base rounded, granular; umbilicus wide, margin many crenulated, umbilical wall with fine spiral ribs; aperture round, nearly continuous. Diam. 10 mill.

New Guinea.

Hinds states that the type of this species was a dead shell, without color and, evidently, had been lying in the mud for some time. He thinks that perhaps the cancellation is somewhat more distinct than may be looked for in living specimens.

T. VIRGATA, Hinds. Pl. 6. figs. 2, 3.

Shell discoidal; whorls granose, flat on top, rounded below, narrowly channeled at the suture, longitudinally striated, spirally sulcate and ribbed, the rib on the periphery and that below it being strongest; color pale-fulvous, with chocolate-red bands above and below the suture, on and below the periphery and near the umbilicus; umbilicus moderate, with white crenulations, umbilical wall of a chocolate-red color, not ribbed; aperture slightly angular. Diam. 6 mill.

New Guinea.

T. CÆLATA, Hinds. Pl. 6, figs. 4, 5.

Shell discoidal; whorls spirally sulcate and tubercular near the suture, radiately striated in the middle, periphery broad, with two tubercular ribs; color fuscous, shining; base rounded

radiately striated, spirally sulcate; umbilicus wide, margin numerously crenulated, umbilical wall with a spiral rib.

Diam. 9 mill.

Straits of Macassar.

Easily known by the flatness of the shell and the two very prominent ribs about the periphery. Hanley's figure of this species in Thes. Conch. is a very poor representation.

T. DISCOIDEA, Pease. Pl. 6, fig. 6.

Shell very depressed; whorls finely granulated, slightly channeled at the suture, spirally sulcate and ribbed, the two ribs of the periphery being very strong; color white, clouded with very faint chocolate; base rounded, umbilicus lightly crenulated, channeled, umbilical wall with two spiral ribs. Diam. 6·3 mill.

Paumotus.

T. ASPERA, Hinds. Pl. 6, figs. 7, 8.

Shell discoidal, slightly conical; whorls rough, tubercular, radiately striated, spirally sulcate, strongly ribbed on the periphery; base rounded, umbilicus very wide, its margin numerously crenulated. Diam. 9·4 mill.

Straits of Macassar.

The type of this species was a dead shell and consequently without color.

T. ARCHITÆ, Costa. Pl. 6, figs. 9, 10, 11.

Shell discoidal; whorls flat above, rounded below, channeled at the suture, longitudinally and spirally sulcate, crenulated; color yellowish white; umbilicus very wide, margin finely crenulated. Diam. 7·5 mill.

Mediterranean.

T. SOWERBYI, Hanley. Pl. 6, figs. 12, 13.

Shell nearly discoidal; whorls channeled at the suture, with four granose cingulæ, the upper three of which are equal and the fourth greater, last whorl with 13–14 cingulæ, periphery sloping off, not biangulate; color yellowish white, clouded or variegated; umbilicus moderate, its margins crenulated. Diam. 6 mill.

Mediterranean, Tunis.

This species is distinguished from the preceding by the much more narrow umbilicus.

T. BISULCATA, d'Orb. Pl. 6, figs. 14–16.

Shell depressed, conic; whorls 5, longitudinally striated, spirally sulcate and five-ribbed above, periphery two-ribbed, base six-ribbed; color dirty white; umbilicus moderate, margin crenulated, umbilical wall without ribs. Diam. 10 mill.

West Indies.

Hanley's figure of this species in Thes. Conch. is very poor.

T. DELPHINULOIDES, d'Orb. Pl. 6, figs. 17–19.

Shell depressed, conic; whorls 4-ribbed, body-whorl 12-ribbed; color uniform whitish; umbilicus broad, margin slightly crenulated, not channeled, costate; aperture round. Diam. 7·5 mill.

West Indies.

This and the preceding may be different stages of growth of the same species.

T. NANA, Koch. Pl. 6, figs. 20, 21.

Shell depressed, globular; whorls rounded, angular above, upper part of the whorl with four elevated ribs; color white with radiating red blotches; base smooth; umbilicus moderate, cup-shaped, margin strongly crenulated, umbilical wall radiately striated, and having spiral, granular ribs; aperture roundly quadrangular. Diam. 6 mill.

Chili.

T. EGENA, Gould. Pl. 6, figs. 22, 23.

Shell globose; whorls rounded, channeled at the suture, spirally sulcate near the umbilicus, last whorl 5-ribbed, the two nearest the suture being granular; color nearly white; base convex; umbilicus wide, margin strongly crenulated; aperture subcircular. Diam. 7·5 mill.

New Zealand.

This and the preceding species present such an intermixture of the characters of Torinia and Solarium that I am in doubt as to which genus they should be referred.

T. BOREALIS, Verrill and Smith. Pl. 6, figs. 24, 25.

Shell depressed; whorls 4, crossed by numerous, flexuous, low ribs, with shorter ribs interpolated near the periphery, periphery strongly ribbed, body-whorl flattened just above the periphery and having about 6 small spiral ribs which are separated by

impressed spiral lines; color yellowish brown; base slightly convex, having numerous fine spiral lines near the periphery, also covered with low ribs radiating from the umbilicus, near which they are nodulous. Diam. 12 mill.

Coast of New England.

T. ROSULENTA, Watson. Pl. 6, fig. 34.

Umbilicus very wide; whorls 5, shouldered with three or four elevated spiral threads, last whorl with numerous spiral threads, the upper four of which are very strong; color ruddy-yellow with bright crimson spots; umbilical wall with numerous spiral threads; aperture round. Diam. 6 mill.

Port Jackson.

Unfigured and Doubtful Species.

T. RIISEI, Mörch. *West Indies.*
T. SULCIFERA, Pease. *Polynesia.*
T. BICARINATA, Phil. *China Sea.*

Probably not a member of this family.

T. TRICINCTA, Phil. *Guinea.*
T. IMPLEXA, Migh. *Oahu.*

Subgenus PSEUDOMALAXIS, Fisch., 1883.

T. ZANCLEA, Phil. Pl. 6, figs. 26–28.

Shell minute, planorbiform; whorls quadrangular, periphery broad, with a rib above and another below; color fulvous, clouded with alternate light and dark; umbilicus very wide; aperture nearly square. Operculum as in typical Torinia.

Diam. 3·5 mill.

Mediterranean.

Subgenus GYRISCUS, Tiberi, 1867.

T. JEFFREYSIANA, Tiberi. Pl. 6, figs. 29, 30; Pl. 1, fig. 17.

Shell turbinate; whorls 7, rounded, granular in spiral series, suture profound, last whorl slightly depressed at the base; color yellowish, passing into a pale reddish brown; umbilicus moderate, deep; aperture subrotund, the margins united by a callous deposit, columellar lip sinuous, reflected, closing a part of the umbilicus. Diam. 8–9, alt. 10–11 mill.

Mediterranean.

Subgenus Episcynia, Mörch, 1875.

T. inornata, d'Orb. Pl. 6, figs. 32, 33.

Shell convex; whorls 5, smooth, glassy white, shining, roundly carinate at the periphery; base convex; umbilicus moderate, smooth; aperture oval. Diam. 3 mill.

St. Thomas, West Indies.

The smoothness of the shell, its glassy appearance, its minuteness and the simple umbilicus are perphaps enough to rule this subgenus out of the family.

Genus OMALAXIS, Desh., 1830.

O. Pernambucensis, Watson. Pl. 6, figs. 35, 36.

Shell discoidal; whorls about four, contiguous, except the last which is slightly dissolute, convex, obsoletely spirally threaded, longitudinally ribbed; color white, glassy or porcellanous; umbilicus very wide, exposing all the whorls; aperture oval, lip not in contact with the whorl above. Diam. 2·5 mill.

Pernambuco.

O. nobilis, Verrill. Pl. 6, fig. 31.

Shell planorbiform, upper surface nearly flat, base very concave; whorls 5, nearly quadrangular, the two peripheral angles strongly granosely carinate, peripheral area spirally ribbed, surface of the shell with radiating, elevated growth-lines; color pale chestnut, irregularly and indistinctly banded with whitish chestnut; base spirally striated; aperture trapezoidal with the outer corners angular and the inner corners rounded. Operculum thin, horny, multispiral, slightly concave. Diam. 11 mill.

Chesapeake Bay.

Unfigured Species.

O. lirata, Verrill. *Newport, R. I.*

INDEX AND SYNONYMY.

SOLARIIDÆ.

PAGE.

Æthiops (Torinia), Menke. Synopsis, p. 142, 1830, . . 18
Æthiops (Torinia), Hanley. Thes. Conch., iii, f. 68–70, 1866. = T. cyclostoma, Menke, ... 18
Architæ (Torinia), Costa. Atti dell' Acad. Scienze., iii, p. 40, No. 15, 1830, ... 21
Architectoma, Gray. Zool. Proc., p. 151, 1847. = Architectonica, Bolt., ... 1
Architectonica, Bolt. Mus. 1798. = Solarium, Lam. . 5
Areola (Torinia), Gmel. Syst. Nat. Ed., xiii, p. 3575. = T. variegata, Gmel., ... 17
Aspera (Torinia), Hinds. Zool. Proc , p. 23, 1844, . . 21
Australis (Solarium perspectivum, var.), Ph. Zeitsch. für Malak, p. 168, 1848, ... 8
Australis (Solarium hybridum, var.), Hanley. Thes. Conch., iii, p. 236, 1866, ... 15

Bairdii (Solarium), Hanley. Sowb. Thes. Conch., iii, p. 231, f. 48, 49, 1866, ... 13
Bicarinatum (Solarium), Phil. in Kuster, ed. Chemn., p. 23, t. 3, f. 14, 1853, ... 23
Bisulcata (Torinia), d'Orb. Moll. de Cuba, ii, p. 66, t. 19, f. 17–20, 1853, ... 22
Bifrontia, Desh. Coq. Foss. de Paris, ii, p. 221, 1824–37. = Omalaxis, Desh., 1832, ... 7
Boreale (Solarium), Verrill and Smith. Conn. Trans., v, p. 529, t 57, f. 29, 30, 1882, ... 22
Brunnea (Fluxina), Dall. Bull. Mus. Comp. Zool , ix, p. 52, 1882, ... 16

Cælata (Torinia), Hinds. Zool. Proc., p. 25, 1844, . . 20
Calcar (Solarium), Costa. Microd. Medit., p. 58, t. 11, f, 5, 1861, ... 14
Chemnitzii (Solarium), Kien. Coq. Viv., p. 12, t. 4, f. 8. = Torinia infundibuliforme, Gmel. 20
Cingulum (Solarium), Kiener. Coq. Viv., p. 6, t. 3, f. 6, 6 *a*, 15
Climacopoma, Fisch. Manuel de Conch., p. 768, 1883, . 7
Conica (Torinia), Pse. Zool. Proc., p. 514, 1865. = T. Trochoides, Desh.
Conulus (Solarium), Weink. Conch. des Mittelmeer., ii, p. 261, 1868, ... 16

PAGE.

Crenella (Torinia), Linn. Syst. Nat. Ed., xii, p. 628, . 20
Cumingii (Solarium), Hanley. Zool. Proc., p. 204, 1862. . 13
Cyclostoma (Torinia), Hanley. Thes. Conch., iii, f. 66, 67, 1866. = T. cylindrica, Gmel. 18
Cyclostoma (Torinia), Migh. Bost. Proc., ii, p. 22, 1845. = T. Mighelsi, Phil. 19
Cyclostoma (Torinia), Menke. Synopsis, p. 142, 1830, . 18
Cylindracea (Torinia), Hanley (in part). Thes. Conch., iii, f. 99, 1866. = T. infundibuliforme, Gmel. . . . 20
Cylindraceum (Solarium), Dillw. Cat., ii, p. 767, 1815. = Torinia cylindrica, Gmel. 18
Cylindrica (Torinia), Gmel. Syst. Nat., p. 3572, . . 17

Dealbata (Torinia), Hinds. Zool. Proc., p. 24, 1844. = T. trochoides, Desh. 18
Delphinuloides (Torinia), d'Orb. Moll. de Cuba., ii, p. 67, t. 19, f. 21–24, 1853, ... 22
Depressa (Torinia variegata, var.), Phil. Conch. Cab., t. 4, f. 10, 1853, ... 17
Dilecta (Torinia), Desh. Conch. de l'Isle de Reunion, p. 68, t. 9, f. 3–6, 1863, ... 19
Discoidea (Torinia), Pease. Amer. Journ. Conch., iv, p. 102, t. 12, f. 18, 1868, ... 21
Disculus, Desh., 1863. = Philippia, Gray, . . . 5
Discus (Solarium), Phil. Enum. Moll. Sicil., ii, p. 225, t. 28, f. 12, 1844. = S. pseudoperspectivum, Brocchi, . . 15
Dorsuosa (Torinia), Hinds. Zool. Proc., p. 23, 1844, . . 17
Dunkeri (Solarium), Hanley. Zool. Proc., p. 204, 1862, . 9

Eccyliomphalus, Portlock. Geol. Rept., p. 411, 1843. . 8
Egenum (Solarium), Gld. Bost. Proc., iii, p. 84, 1849, . 22
Episcynia, Mörch. Mal. Blätt., xxii, p. 155, 1875, . . 7
Enomphalus, Sowb. Min. Conch., 1814, ... 8

Fallaciosa (Torinia straminea, var.), Tiberi. Bull. Mal. Ital., v, p. 35, 1872 = T. sicula, Cantr. 19
Fenestrata (Torinia), Hinds. Zool. Proc., p. 25, 1844, . 20
Fluxina, Dall. Bull. Mus. Comp. Zool., ix, p. 51, 1882. . 6
Formosum (Solarium), Hinds. Zool. Proc., p. 22, 1844. = S. perspectivum, Linn. 8
Fragile (Solarium), Hinds. Zool. Proc , p. 24, 1844. = S. pictum, Phil. 10
Fuliginosum (Solarium), Hinds. Zool. Proc., p. 158, 1844, 13
Fulva (Torinia), Hinds. Zool. Proc., p. 24, 1844. = T. straminea, Gmel. 19
Granulatum (Solarium), Lam. Anim. sans Vert., Edit. Desh., ix, p. 98, 1845. 11
Gyriscus, Tiberi. Journ. de Conch., p. 303, 1867, . . 7

PAGE.

Gyrus (Trochus), Meusch. Gronov., p. 323, No. 1487.
= Torinia variegata, Gmel. 17

Hanleyi (Solarium), Sowb. Hanley, Thes. Conch., 1866.
= S. fuliginosum, Hinds. 13

Heberti (Torinia), Desh. Enc. Méth., ii, p. 159, 1830.
= T. cylindrica, Gmel., ... 18

Heliacus, d'Orb. Moll. de Cuba, ii, p. 68, 1853.
= Torinia, Gray, 1840, ... 7

Hybridum (Solarium), Linn. Syst. Nat., p. 1228, 1767, . 14

Hybridum (Solarium), Petit (not Linn.). Journ. de Conch., iii, p. 176. = S. conulus, Weink., ... 16

Hybridum (Solarium), Monts. Notiz. Solar. Medit., p. 7, f. 10, 11, 1873. = S. conulus, Weink., ... 16

Implexa (Torinia), Migh. Bost. Proc., ii, p. 22, 1845, . 23

Impressum (Solarium), G. and H. Nevill. Journ. Asiatic Soc. Bengal, p. 162, t. 17, f. 11, 1869, ... 14

Incisum (Solarium), Phil. Zeitsch. für Malak., p. 169, 1848.
= S. perspectivum, Linn., ... 8

Infundibuliforme (Torinia), Gmel. Syst. Nat. Ed., xiii, p. 3575, 1793, ... 19

Inornatum (Solarium), d'Orb. Moll. de Cuba, ii, p. 67, t. 19, f. 25-27. 1853, ... 24

Jeffreysianus (Gyriscus), Tiberi. Journ. de Conch., xv, p. 303, 1867, ... 23

Krebsii (Solarium). Morch. Mal. Blatt., xxii, p. 155, 1875, 14

Lævigatum (Solarium), Lam. Anim. sans Vert., Edit. Desh., ix, p. 98, 1845, ... 12

Layardi (Philippia), Ad. Zool. Proc., p. 317, 1854.
= Solarium hybridum, Linn., ... 14

Lirata (Omalaxis), Verrill. Conn. Trans., v, p. 529, . . 24

Luteum (Solarium), Ph. (not Lam.). Enum. Moll. Sicil., i, p. 174, t. 10, f. 27, 1836. = S. conulus, Weink.

Luteum (Solarium), Lam. Anim. sans Vert., Edit. Desh., ix, p. 100, 1845, ... 16

Maculatum (Solarium), Rve. Element. Conch., pl. 13, f. 62, 1860. = S. fuliginosum, Hinds, ... 13

Maximum (Solarium), Phil. Zeitsch. für Malak., p. 170, 1848, ... 9

Mediterranea (Torinia straminea, var.), Phil. Conch. Cab. Index, 1853. = T. sicula, Cantr. 19

Mediterraneum (Solarium), Monts. Notizie Foss. M. Pellegrino e Ficarrazi, p. 31, 1872, ... 15

Mighelsi (Torinia), Phil. Küster, Conch. Cab., p. 36, 1853, 19

Modestum (Solarium), Phil. Zeit. für Malak., p. 171, 1848, 9

Nana (Torinia), Koch. Zeitsch. für Malak., 1851, . . 22

PAGE.

Nobile (Solarium), (Bolt.), Hanley. Thes. Conch., iii, p. 230, f. 35, 1866. = S. verrucosum, Phil. 12
Nobilis (Omalaxis), Verrill. Conn. Trans., vi, p. 423, t. 44, f. 12, 1885, ... 24
Nubila (Torinia), Mke. Dkr., Zeitsch. für Malac., p. 170, 1848, ... 18
Omalaxis, Desh. Enc Meth., p. 659, 1832, ... 7
Ophileta, Vanuxem. Pal. New York, i, p. 11, 1842, . . . 7
Oxytropis (Philippia), A. Adams. Zool. Proc., p. 317, 1854, 15
Perdix (Solarium), Hinds. Zool. Proc., p. 22, 1844, . . 9
Pernambucensis (Omalaxis), Watson. Challenger Exped., xv, p. 157, t. 8, f. 13, 1886, ... 24
Perspectiviforme (Solarium), Tiberi. Malac. Ital., v, p. 32, 1872. = S. pseudoperspectivum, Brocchi, ... 15
Perspectivinnculus (Trochus), Dillwyn. Cat., ii, p. 783, No. 59. = Torinia variegata, Gmel. 17
Perspectivinnculus (Trochus), Meusch. Gronov., p. 323, N. 1486. = Solarium hybridum, Linn. 14
Perspectivum (Solarium), Linn. Syst. Nat., Ed. xii, p. 1227, 1767, ... 8
Perspectivus (Trochus), Chemn. (in part). Conch. v, p. 121, t. 172, f. 1695, 1696, 1781. = Solarium granulatum, Lam. 12
Philippia, Gray, 1840? Zool. Proc., p. 146, 1847, . . 5
Pictum (Solarium), Phil. Zeit. für Malak., p. 171, 1848, . 10
Placentula (Solarium), Hinds. Zool. Proc., p. 22, 1844, . 13
Planulata (Torinia variegata, var.), Hanley. Thes. Conch., iii, p. 238, f. 63, 1866, ... 17
Platyschisma, McCoy. Carb. Foss. Ireland, 1844, . . 9
Pseudomalaxis, Fisch. Man. de Conch., p. 767, 1883, . 7
Pseudoperspectivum (Solarium), Weink. and authors (not Brocchi). = S. Mediterraneum, Monts. 16
Pseudoperspectivum (Solarium), Brocchi. Conch. Foss. Subapp., ii, p. 359, t. 5, f. 8, 1814, ... 15
Pulchellum (Solarium), Tiberi. Journ. de Conch., xvi, p. 179, 1868. = S. Mediterraneum, Monts. . . . 16
Purpuratum (Solarium), Hinds. Zool. Proc., p. 25, 1844, . 11
Quadriceps (Solarium), Hinds. Zool. Proc., p. 23, 1844, . 10
Reevei (Solarium), Hanley. Zool. Proc., p. 204, 1862, . 12
Regium (Solarium), Hanley. Zool. Proc., p. 205, 1862, . 11
Riisei (Torinia), Mörch. Mal. Blatt., xxii, p. 156, 1875, . 23
Rosulentum (Solarium), Watson. Journ. Linn. Soc., xvi, p. 610, 1883, ... 23
Schizostoma, Bronn. Leth. Geogn., i, 1835, . . . 8
Sicula (Torinia straminea, var.), Cantr. Bull. Acad. Brux., ix, p. 343, 1842, ... 19

PAGE.
Siculum (Solarium), Petit (not Cantr.). Cat. Test. Mar., p. 120, 1869. = S. conulus, Weink.
Solariorbis, Conrad. Amer. Jour. Conch., i, p. 30, 1865. = Solarium, Lam. 5
Solarium, Lam. Journ. Soc. Nat. Paris, 1799, . . . 5
Sowerbyi (Torinia), Hanley. Zool. Proc., p. 206, 1862, . 21
Stellatum (Solarium), Phil. Zeitsch. für Malak., p. 172, 1848. = S. purpuratum, Hinds, ... 11
Straminea (Torinia), Gmel. Syst. Nat., p. 3575, . . 19
Strigata (Torinia infundibuliformc, var.), Hanley. Thes. Conc., iii, f. 94, 1866, ... 20
Sulcatum (Solarium), O. Costa (not Lamarck). Mem. Acad. Napoli, 1844. = S. Mediterraneum, Monts. . . . 16
Sulcatum (Solarium), O. G. Costa, 1841, = S. Mediterraneum, Monts.
Sulcifera (Torinia), Pease. Amer. Journ. Conch., v, p. 79, 1870, ... 23
Taylori (Solarium), Hanley. Zool. Proc., p. 205, 1862. = S. maximum, Phil. 10
Teretropoma, Rochbrune. Bull. Soc. Philomat. Paris, 1881. = Torinia, Gray, ... 7
Tessellata (Torinia), Desh. Enc. Meth., p. 160, 1830. = T. variegata, Gmel. 17
Torinia, Gray. Syn. Brit. Mus., 1840; Zool. Proc., p. 151, 1847, ... 6
Tricarinatum (Solarium), Stearns. Bost. Proc., xv, p. 23, 1873, ... 14
Tricincta (Torinia), Phil. Zeitsch. für Malak., 1851, . . 23
Trochleare (Solarium), Hinds. Zool Proc., p. 25, 1844, = S. perspectivum, Linn. 8
Trochoidea (Torinia), Desh. Enc. Meth., ii, p. 160, 1830, . 18
Tryoni (Solarium), Marshall, ... 10
Undata (Philippia hybrida, var.), Hanley. Thes. Conch., iii, p. 236, f. 42, 43, 1866, ... 14
Valenciennesii (Architectonica), Mörch. Mal. Blätt., vi, p. 122, ... 14
Variegata (Torinia), Gmel. Syst. Nat., p. 3575, . . . 16
Verrucosum (Solarium), Ph. Zeitsch. für Malak., p. 172, 1848, ... 12
Virgata (Torinia), Hinds. Zool. Proc., p. 24, 1844, . . 20
Wroblewskyi (Solarium), Mörch. Mal. Blätt., xxii, p. 154, 1875, ... 14
Zancleus (Omalaxis), Phil. Moll. Sicil., ii, t. 28, f. 11, 1844, 23
Zonatum (Solarium), Ph. Zeitsch. für Malak., p, 173, 1848. = S. perspectivum, Linn. 8

REFERENCE TO PLATES.

SOLARIIDÆ.

Plate 1.

FIGURE.		PAGE.
1.	Solarium perspectivum, Linn. Animal. Kien. Coq. Viv., t. 1, f. 1.	5
2.	Solarium perspectivum, Linn. Animal. Archiv. für Naturg., t. 5, f. 1, 1861,	5
3	Solarium perspectivum, Linn. Tentacles. Ibid., t. 5, f. 2,	5
4.	Solarium perspectivum, Linn. Jaw. Ibid., t. 5, f. 3,	1
5, 6,	Solarium perspectivum, Linn. Dentition. Troschel. Gebiss der Schnecken., ii, t. 15, f. 4,	1
7	Philippia lutea, Lam. Jaw. Archiv. für Naturg., t. 5, f. 10, 1861,	1
8.	Philippia lutea, Lam. Teeth. Trosch. Gebiss der Schnecken., ii, t. 15, f. 5,	1
9.	Philippia lutea, Lam. Operculum. Phil., Küster's, Conch. Cab., t. 4, f. 11,	5
10.	Torinia variegata, Gmel. Animal. Quoy, Voy. Astr., t. 62, f. 24,	6
11, 12.	Torinia cylindrica, Gmel. Dentition. Trosch. Gebiss der Schneck., ii, t. 15, f. 7,	1
13.	Torinia dilecta, Desh. Operculum. Conch. Ile Reunion, t. 9, f. 6,	6
14–16.	Torinia variegata, Gmel. Operculum of West Co. America specimens, according to Pease, Amer. Journ. Conch., v, t. 8, f. 6,	17
17.	Gyriscus Jeffreysianus, Tiberi. Operculum. Journ. de Conch., t. 5, f. 1, 1868,	7

Plate 2.

18, 19.	Solarium perspectivum, Linn. Hanley, Thes. Conch., iii, f. 19, 20,	8
20, 21.	Solarium Var. Australis, Phil. Küster's Conch. Cab., t. 4, f. 8,	8
22, 23.	Solarium modestum, Phil. Hanley, Thes. Conch., iii, f. 11, 12,	9
24, 25	Solarium perdix, Hinds. Voy. Sulph., t. 14, f. 3, 4,	9
26, 27.	Solarium Dunkeri, Hanley. Thes. Conch., iii, f. 29, 30,	9
28, 29.	Solarium Tryoni, Marshall. From Type,	10
30.	Solarium regium, Hanley. Reeve, Conch. Icon., f. 16,	11

Plate 3.

FIGURE. PAGE.

31, 32. Solarium maximum, Phil. Hanley, Thes. Conch., iii, f. 5, 6, ... 9
33, 34. Solarium Taylori, Hanley (= maximum). Ibid., f. 31, 32, ... 10
35, 36. Solarium pictum, Phil. Ibid., f. 33, 34, . . . 10
37, 38. Solarium verrucosum, Phil. Küster, Conch. Cab, t. 2, f. 5, 6, ... 12

Plate 4.

39, 40. Solarium quadriceps, Hinds. Hanley, Thes. Conch., iii, f. 25, 26, ... 10
41, 42. Solarium purpuratum, Hinds. Ibid., f. 7, 8, . . 11
43, 44. Solarium lævigatum, Lam. Kiener, Coq. Viv., t. 2, f. 3, 12
45, 46. Solarium Reevei, Hanley. Thes. Conch., iii, f. 9, 10, 12
47, 48. Solarium fuliginosum, Hinds. Ibid., f. 13, 14, . 13
49, 50. Solarium Bairdii, Hanley. Ibid., f. 48, 49, . . 13
51, 52. Solarium placentula, Hinds. Ibid., f. 23, 24, . 13
52 *a*, *b*. Solarium impressum, Nevill. Jour. Asiat. Soc. Bengal, t. 17, f. 11, 11, a, ... 14

Plate 5.

53, 54. Solarium granulatum, Lam. Hanley, Thes. Conch., f. 1, 2, ... 11
55, 56. Solarium Hanleyi, Sowb. (= fuliginosum). Ibid, f. 15, 16, ... 13
57, 58. Solarium Cumingii, Hanley. Ibid., f. 44, 45, . . 13
59, 60. Solarium hybridum, Linn. Hanley, Thes. Conch., iii, f. 40, 41, ... 14
61, 62. Solarium, var. undatum. Hanley. Ibid., f. 42, 43, . 14
63. Solarium cingulum. Kien., base. Ibid., f. 56, . . 15
64. Solarium cingulum, Kien., spire. Rve., Conch. Icon., f. 19, 15
65, 66. Solarium oxytropis, A. Ad. Hanley, Thes. Conch., f. 46, 47, ... 15
67, 68. Solarium pseudoperspectivum, Brocc. Ibid., f 83, 84, 15
69, 70. Solarium Mediterraneum, Monts. Solar. Medit., f. 8, 9, ... 15
71, 72. Solarium luteum, Lam. Hanley, Thes. Conch., iii, f. 53, 54, ... 16
73, 74. Solarium conulus, Weink. From specimen, . . 16
75, 76. Torinia variegata, Gmel. Hanley, Thes. Conch., f. 61, 62, ... 16
77. Torinia, var. planulata, Hanley. Ibid., f. 63, . . 17
78, 79. Torinia, var. depressa, Phil. Küster's Conch. Cab., t. 4, f. 10, ... 17
80, 81. Torinia dorsuosa, Hinds. Hanley, Thes. Conch., iii, f. 73, 74, ... 17

FIGURE. PAGE.

82. Torinia cylindrica, Gmel. Phil., Küster's Conch. Cab., t. 4, f. 4, ... 17
83, 84. Torinia cyclostoma, Menke. Ibid., t. 4, f. 3, . 18
85, 86. Torinia Æthiops, Menke. Ibid., t. 4, f. 1, . . 18
86 *a*. Torinia nubilum, Menke. Ibid., t 4, f. 2. . . 18
87, 88. Torinia trochoidea, Desh. Hanley, Thes. Conch., iii, f. 89, 90, ... 18

PLATE 6.

89, 90. Torinia Mighelsi, Phil. Hanley, Thes. Conch., iii, f. 87, 88, ... 19
91, 92. Torinia dilecta, Desh. Moll. Ile Reunion, t. 9, f. 3, 19
93, 94. Torinia straminea, Gmel. Hanley, Thes. Conch., f. 95, 97, ... 19
95, 96. Torinia straminea, var. Sicula, Cantr. Phil., Küster's Conch. Cab., t. 4, f. 14, ... 19
97, 98. Torinia infundibuliformis, Gmel. Hanley, Thes. Conch., f. 92, 93, ... 19
99. Torinia infundibuliformis, var. strigata, Hanley. Ibid., f. 94, ... 20
100–1. Torinia fenestrata, Hinds. Ibid., f. 79, 80, . . 20
2, 3. Torinia virgata, Hinds. Ibid., f. 85, 86, . . . 20
4, 5. Torinia cælata, Hinds. Voy. Sulph., t. 14, f. 11, 12, 20
6. Torinia discoidea, Pse. Amer. Journ. Conch., iv, t. 12, f. 18, ... 21
7, 8. Torinia aspera, Hinds. Voy. Sulph., t. 14, f. 9, 10, 21
9, 10, 11. Torinia Architæ, Costa. Monts. Notiz. Sol. Medit., f. 21–23, ... 21
12, 13. Torinia Sowerbii, Hanley. Thes. Conch., iii, f. 81, 82, 21
14–16. Torinia bisulcata, d'Orb. Moll. Cuba, t. 19, f. 17–19, 22
17–19. Torinia delphinuloides, d'Orb Ibid., t. 19, f. 21–23, 22
20, 21. Torinia nana, Koch. Phil., Küster's Conch. Cab., t. 4, f. 5, ... 22
22, 23. Torinia egena, Gould. Moll. Wilkes' U. S. Exp. Exped., f. 226, ... 22
24, 25. Torinia boreale, Verrill. Trans. Conn. Acad., v, t. 57, f. 29, 30. 22
26–28. Torinia Zanclea, Phil. Hanley, Thes. Conch., iii, f. 101–103, ... 23
29, 30. Gyriscus Jeffreysianus, Tiberi. Journ. de Conch., 1868, t 5, f. 1, ... 23
31. Omalaxis nobilis, Verrill. Trans. Conn. Acad., vi, t. 44, f. 12, ... 24
32, 33. Episcynia inornata, d'Orb. Moll. Cuba, t. 19, f. 25, 26, 24
34. Torinia rosulentum, Watson. Challenger Exp., xv, t. 8, f. 12 *b*, ... 23
35, 36. Omalaxis Pernambucensis, Watson. Ibid., xv, t. 8, f. 13 *b*, *c*, ... 24

Family *IANTHINIDÆ.*

Shell thin, fragile, turbinated; whitish or purplish; aperture oval or subtetragonal, the columella a little twisted, lip simple, curved. No operculum.

Animal pelagic, sustained by a vesicular body called the float, and to which the eggs are attached. The float is composed of a mass of vesicles filled with air, the walls resisting, subcartilaginous, supported by a narrow peduncle, formed by and adhering to the foot. Sexes separate, no copulatory organ. Rostrum proboscidiform; no jaws; radula composed of a great number of elongated teeth, no central tooth. Carnivorous. Secretes a purple fluid, which is ejected from the branchial cavity, when irritated.

Genus IANTHINA, Lam., 1799.

Head large, muzzle-shaped, eyes not visible or sessile, tentacles forked so that each appears like a pair, foot rather short, the epipodial lobe somewhat elongated and ciliated, branchial plumes two, unequal.

The float is found in both sexes, and whilst in the female the eggs are usually attached to the lower surface thereof, the animal in some species is viviparous; embryos taken from the uterus are operculated, the head has a ciliated velum, the eyes are large and well pigmented.

Shell imperforate, without epidermis, fragile, trochiform or turbiniform, nucleus small, styliform, oblique, spire light purplish white, base deeper purple; whorls few, convex, with striæ of growth, angular or gathered at the periphery; outer lip with a sinus in the middle, columella thin, twisted.

About 30 nominal species have been described, from the Atlantic and Pacific Oceans; I reduce them to three species, with a few varieties.

A species is found in the Pliocene of Italy.

Reeve monographed Ianthina in 1858, including 25 species, a portion of which he first described, and Mörch, in the Journal

de Conchyliologie, 261, 1860, gave a more scientific synopsis of the species, increasing their number to 31; finally, Sowerby (Thesaurus Conchyliorum, v, 1882) reduced them to 11.

The following sections of Mörch have very slight value. I include the first and second in a single species, whilst the other three may divide two species between them.

Section Iodes (Leach), Gray, 1847.

Solid, depressed conical, last whorl obtusely carinate. Viviparous. I. Britannica, Leach.

Section Achates (Gistel), Mörch, 1860.

Shell thin, acutely carinated. Oviparous, marsupial. Proboscis inflated. I. fragilis, Lam.

Section Ianthina (Bolten, 1798), Mörch, 1860.

Globose, with deep suture, columella produced, aperture sinuated below. Oviparous, marsupial, proboscis cylindrical, branchia protruding. I. nitens, Menke.

Section Amethistina (Schinz, 1825), Mörch, 1860.

Like the last, but aperture rounded below. I. pallida, Harvey.

Section Iodina, Mörch, 1860.

Costulate, lip incised. Oviparous, marsupial. I. exigua, Lam.

The Ianthinæ, or Purple Snails, are gregarious and very abundant on the surface of the ocean where the water is deep and similar in color to themselves. They live on Velellæ, Porpitæ, Physaliæ and other soft animals, usually of similar violet coloring; finally a bluish crustacean dwells on their float. According to Dr. Coates they sometimes eat their own species. The float is readily, even spontaneously detached, and is often encountered in numbers, apart from the animal. If its vesicles are punctured the air escapes and the animal falls to the bottom, from which it appears unable to ascend, and is supposed to perish. The stem of the float is attached to the posterior part of the foot; the anterior part of the foot becomes tubular by the turning over of its margins, and when protruded from the water, encloses a bubble of air, which, being enveloped in a mucous secretion, is added to the anterior portion of the float. There has been much written upon the homologies of this raft; the accepted opinion compares it with the byssus of lamellibranchs.

M. Lucaze-Duthiers made interesting observations upon the secretion of the float by Ianthinæ in captivity (Ann. Sci. Nat., iv, 329, 1865; Ann. Mag. Nat. Hist., xvii, 278, 1866); Mr. Arthur Adams has also given notes on the habits of these animals (Ann. Mag. N. Hist., 3 ser., x, 417). Dr. Ruschenberger, in his Voyage around the World, p. 21, remarks that when captured, the Ianthina emits about a teaspoonful of violet liquid, and he supposes that this copious discharge, like the ink of the cuttle-fish, serves to facilitate the escape of the mollusk from its enemies.

Genus RECLUZIA, Petit, 1853.

Shell paludiniform, thin, white under a brown epidermis; whorls ventricose; aperture obliquely ovate, slightly effused at the base, peristome not continuous, the outer lip acute, entire, columella oblique, somewhat sinuous. No operculum.

Animal like Ianthina, provided with a vesicular float.

The species inhabit the *Arabian Gulf* and *Pacific Ocean.*

Genus SCALITES, Conrad, 1842.

Shell turriculated, whorls flattened above, carinated at the shoulder, and convex below; outer lip sinuous; umbilicus none or very small. S. ANGULATUS, Conr. Silurian. *United States.* (Struct. and Syst. Conch., t. 67, f. 51.)

The systematic position given this fossil as well as its subgenera, is mere guess-work.

Subgenus RAPHISTOMA, Hall, 1847.

Shell turbinated, more depressed, with carinated shoulder, and convex below, as in the typical group. S. STAMINEA, Hall (Struct. and Syst. Conch., t. 67, f. 52).

Subgenus HOLOPEA, Hall, 1847.

This palæozoic group is composed of incongruous elements; its first species has been referred to Littorinidæ, another evidently belongs to Naticidæ, a third resembles Ianthina. The species are mostly casts, and there appears to be no good reason for retaining the group. *Cyclora*, Hall, 1845, has been considered synonymous.

Genus IANTHINA, Lam., 1799.

I. FRAGILIS, Lam. Pl. 9, figs. 94–5; Pl. 10, figs. 6–10.

Whorls slopingly convex, with obtusely angulated periphery, outer lip of aperture very slightly sinuous, violaceous white above, uniform purplish or violaceous below. Diam. 1·5 inches.

Mediterranean, Atlantic O., Indian O., Pacific O.

This is probably Linnæus' *Helix Ianthina.*

Reeve and others distinguish two species which they suppose Lamarck at first confounded under the name of *I. fragilis*; they restrict this name to the more acutely angulated forms (figs. 94, 3, etc.), whilst *I. communis*, Lam. (fig. 99)—the name by which he intended to replace his *I. fragilis*—is reserved for those with obtuse periphery. I confess that I cannot divide them satisfactorily; consequently I include here as synonyms a series of intermediates, which have received the names of:

I. Costæ, Mörch, proposed for *I. bicolor*, Costa (not Menke); *I. vulgaris*, Gray; *Helix Ianthina*, Forskal; *I. violacea*, Adams; *I. penicephala*, Peron; *I. violacea*, Mörch; *I. grandis*, Brown; *I. striulata*, Carp. = *I. Carpenteri*, Mörch (fig. 3), and var. *contorta*, Carp., from Mazatlan; *I. Orbignyi*, Mörch; *I. bicolor*, Menke.

Var. PLANOSPIRATA, Ads. and Reeve. Figs. 94–98.

Depressed, with slopingly convex whorls, obliquely plicately striated; columella arched, somewhat dilately reflected; aperture transverse, a little sinuous on the middle of the outer lip.

Diam. 1·4 inch.

Atlantic Ocean, St. Helena, etc.

May be nominally distinguished from *I. fragilis* by its more rounded periphery and more depressed spire, as well as by the light color of the base immediately around the columella; but apparently connects with it by intermediate stages. Among these, having the form of *planospirata*, but with usually uniform purple base, may be placed here as synonyms *I. depressa*, Reeve (fig. 97); *I. cærulata*, Reeve (fig. 96); *I. casta*, Reeve (fig. 95); *I. balteata*, Reeve (fig. 98); forms with more elevated spire, approaching *I. fragilis* are *I. bicolor* and *I. fragilis*, of Lesson.

Var. BRITANNICA, Leach. Figs. 100–2, 5–9.

Shell a little more elevated than in the type, whorls more exserted and more convex, darker colored.

I. rotundata, Leach; *I. grandis*, Reeve (fig. 2); perhaps *I. Smithiæ*, Reeve (fig. 1); *I. affinis*, Reeve (fig. 6); *I. fibula*, Reeve (fig. 5); *I. roseola*, Reeve (fig. 7); *I. involuta*, Reeve (fig. 8), peculiar growth the result of an injury; *I. Africana*, Reeve (fig. 9), are synonyms.

Var. TROCHOIDEA, Reeve. Fig. 10.

Spire much more elevated, the whorls flatter.

Zanzibar, *Mauritius*.

I. GLOBOSA, Swainson. Pl. 10, figs. 11–16.

Thin, inflated, subglobose, spire short, somewhat immersed; whorls rounded, outer lip a little sinuous in the middle, aperture produced into a short open channel at the base. Light violaceous, becoming a little darker towards the base.

Diam. 1·5 inches.

Mediterranean, *Atlantic O.*, *Mazatlan*, *Mauritius*, *etc.*

The synonyms are *I. prolongata* and *I. violacea*, Blainv.; *I. nitens*, Menke (fig. 11); *I. communis*, Costa, Chenu, Scacchi; *I. elongata*, Maravigna; *I. splendens*, Monts., and var. *minor*, Monts.; var. *Atlantica*, Mörch; *I. decollata*, Carp. (fig. 13); *I. nana*, Gray; *I. iricolor*, Reeve (fig. 14).

Var. PALLIDA, Harvey. Figs. 15, 16.

Lower part of aperture broadly rounded, instead of being produced and subchanneled.

Europe.

Although usually considered a distinct species, this is rather an occasional from of *I. globosa* than a variety. In a series from the West Indies before me the intermediate apertures make a connecting series. The synonyms are *I. rosea*, Anton; *I. patula*, Phil.; var. *minor*, Monts. (= *I. læta*, Monts.); *I. striolata*, Ads. and Reeve (fig. 16).

I. EXIGUA, Lam. Pl. 10, figs. 17–22.

Conically turbinated, whorls a little flattened above, forming an obtuse peripheral angle, spire not sunken at the sutures, surface closely flexuously striate, corresponding with a deep per-

ipheral incision on the outer lip, aperture broadly produced below; light violaceous, darker in the smaller specimens, light banded at the suture. Diam. ·25–·75 inches.

California, *Sandwich Islands*, *Australia*, *Chili*, *Cuba*, *Madeira*, *Atlantic O.*, *Isl. of Bourbon*.

The synonyms are *I. bifida*, Nuttall (fig. 19); *I. capreolata*, Montrouzier (fig. 18); *I. Vinsoni*, Desh. (fig. 20); and ? *I. umbilicata*, Orb. (figs. 21, 22), the latter a malformation.

Unfigured Species of Ianthina.

I. ALBA, Anton. *Hab. unknown.*

I. MEGASTOMA, A. Ad. *Indian Ocean.*

I. NITIDA, A. Ad.

I. INCISA, Phil. *Senegal.*

The three latter are probably synonyms of *I. exigua*, Lam.

Genus RECLUZIA, Petit, 1853.

R. JOHNII, Chemn. Pl. 10, fig. 24.

Rather thin, shining, transparent, with fine, slightly undulated spiral striæ, periphery obtusely angulated and grooved; whitish, with very light bluish violaceous maculations. Length, 23 mill.

Indian Ocean.

We have no satisfactory account of this species.

R. HARGRAVESII, Cox. Pl. 10, fig. 23.

Thin, olivaceous horn-color, very indistinctly banded, spirally obsoletely striated. Length, 38 mill.

Port Stephens, *N. S. Wales.*

Very probably identical with the preceding species.

R. ROLLANDIANA, Recluz. Pl. 10, figs. 25–27.

Rather thin, olivaceous brown, with irregular, subundulating spiral striæ. Length, 23 mill.

Mazatlan? New Caledonia.

R. Montrouzieri, Souverb. (fig. 27), appears to be a synonym.

Var. ANNAMITICA, Wattebled. Fig. 26.

Shell more depressed and more inflated, rarely with darker bands; peristome sinuous, columella twisted a little.

Length, 25 mill. *Annam.*

R. Jehennei, Petit. Pl. 10, fig. 28.

Subperforate, whorls rapidly enlarging and very convex, with deep suture, obsoletely spirally striated, light olivaceous brown. Length, 19 mill.

Arabian Gulf.

Differs from the last species in being shorter and more convex, and from its variety mainly in the more regularly rounded aperture; it is possibly the same species, however.

R. globosa, E. A. Smith. Pl. 10, fig. 29.

Thin, imperforate, whitish, strigate with light brown, with incremental striæ, more distinct and scale-like at the suture, and slight, smooth, spiral sculpture. Length, 11·5 mill.

Solomon Islands.

Its pertinence to the genus is somewhat doubtful; it was described from a specimen denuded of epidermis.

Unfigured Species.

R. turrita, Busch.	*Hab. unknown.*
R. Erythræa, Jickeli.	*Red Sea.*
R. Bensoni, A. Ad.	*China Sea, off Formosa.*
R. aperta, Jeffreys.	= *Torellia vestita*, Jeffreys.

Family *TRICHOTROPIDÆ*.

Shell thin, turbinated, carinated, the ridges bearing epidermal fringes in fresh or living specimens, umbilicated; aperture angulated or subchanneled below, lip sharp, columella obliquely truncated, operculum generally lamellar, with apical nucleus. (Pl. 10, fig. 38).

Animal with a short, broad head; tentacles somewhat distant, with eyes about their middle; foot elongated; siphon very short, but evident.

Central tooth of the radula subquadrangular, multicuspid, lateral large, transverse with finely crenulated margin, two marginal teeth on either side, curved, sharp, simple (2·1·1·1·2). Pl. 7, fig. 37.

Genus TRICHOTROPIS, Brod. and Sowb., 1829.

Characters those of the family. There are about 15 species, inhabiting Arctic seas. Fossil, in the English Crag.

Trichophora, Desh., 1830, is a synonym. The name signifies "hairy keel."

The following sections of Trichotropis have been proposed: they have little value:—

Section Trichotropis (sensu stricto). T. bicarinata, Sowb.

Section Ariadna, Fischer, 1864.

Shell without epidermal fringes. T. borealis, Brod. and Sowb.

Has the epidermal fringes in fresh specimens.

Verena, Gray, 1857 (not H. and A. Adams, 1854), is a synonym.

Section Iphinoe, H. and A. Adams, 1854.

Shell widely umbilicated, aperture subtriangular. T. unicarinata, Sowb.

The width of the umbilicus varies in the species, so that the group is unimportant in its characters.

Subgenus Alora, H. Adams, 1861.

Shell ovate-fusiform, slightly umbilicated, thin; spire elevated; whorls convex, cancellated with elevated spiral ribs and longi-

tudinal lamellæ; aperture oval, slightly produced in front, inner lip smooth, rounded, slightly reflexed in front, outer lip simple, acute. T. GOULDII, A. Ad., *W. Coast Central Am.*

Subgenus GYROTROPSIS, Gabb, 1876.

Shell thin, spire elevated, umbilicus wide, funnel-shaped, last whorl angulated above and below the periphery, and covered with very thin foliated longitudinal varices. T. SQUAMOSA, Gabb. Cretaceous, *N. Carolina* (Pl. 7, fig. 39).

? Genus SEPARATISTA, Gray, 1847.

Shell subdiscoidal, with very short spire, the last whorl separated from its predecessors, forming a very large umbilicus; aperture slightly channeled at the base. This group, which I formerly included in Muricidæ (see Manual, ii, p. 213), is doubtfully referred to Trichotropidæ by Dr. Fischer and others.

Genus TORELLIA, Lovén, in Jeffreys, 1867.

Shell narrowly perforated, globular, covered by a pilose epidermis; spire short, depressed; mouth rounded, with a hardly perceptible basal sinus; lip thin, curved; columella concave, subtruncated at the base.

Differs from Trichotropis in being holostomate and subglobose. *Trachyoma*, Seguenza, is a synonym. T. VESTITA, Jeffreys. *Arctic Seas.*

Genus SEGUENZIA, Jeffreys, 1876.

Shell thin, turbinate or subtrochoid, translucent, the outer layer very slight, somewhat nacreous in fresh specimens, with spiral carinations; aperture irregular, sinuous behind, columella twisted, base with a sinus. Operculum thin, oval, with subcentral nucleus, and with obsolete, numerous concentric lines (Pl. 7, fig. 41). Radula (Pl. 7, fig. 40).

The position of this group of deep-sea minute shells is not well ascertained. The soft parts have not been described. Verrill, who obtained the dentition, formed for the species a family, which he located near Chenopus; Dr. Jeffreys places them near Solariidæ and Dr. Watson in Trochidæ (on account of the operculum and slight pearly layer of the shell). I place the group here, for the present.

Lævocochlis, Dunker and Metzger, has been referred to Trichotropidæ by Dr. von Martens. I shall include it in my monograph of the family Cerithiidæ.

Trichotropis has been monographed by:

Sowerby, Thes. Conchyl., iii, 321. 12 species.

Sowerby, Conch. Icon., xix, 13 sp., 1874.

Genus TRICHOTROPIS, Brod. et Sowb., 1829.

T. BICARINATA, Brod. and Sowb. Pl. 7, figs. 42, 43.

Rather thin, whorls few, the last very large, encircled by two distant ciliated keels; umbilicus rather large, with ciliated margin; epidermis yellowish brown. Length, 1·5 inches.

Japan, *Alaska*, *Grinnell Land*.

T. Sowerbyanus, Lesson, is a synonym, and *T. tenuis*, E. A. Smith (fig. 43), is a monstrosity.

Var. ALTA, Dall.

Whorls 4, with more elevated spire, aperture narrower and smaller, umbilical excavation much narrower and smaller; solid and strong.

Plover Bay, *E. Siberia*.

Var. SPECTABILIS, Dall.

Whorls 5, with elevated spire; columella narrow, waved, not truncate, straight, not arched as in the two preceding forms, its outer edge strongly elevated; umbilicus a mere groove; whorls much flatter above and below, the last wide out of proportion to the spire, the second carina apparent on all the whorls; aperture sharply pointed below, painted with sea-green within and on the columella.

Near *Plover Bay*, *E. Siberia*.

T. BOREALIS, Brod. and Sowb. Pl. 7, figs. 44–48, 52, 59.

Umbilicated; whorls few, shouldered, and spirally keeled, the last with two to five strong keels, varying in development; covered with a yellowish brown epidermis, hairy on the ridges, aperture often pink within. Length, 1 inch.

Northern Europe, *Greenland* to *Massachusetts*, *Arctic America*, *Japan*.

There are a number of synonyms, partly in consequence of the great variation in the development of the keels, much

affecting the contour and general appearance. I include here: *T. Atlantica*, Beck; *T. acuminata*, Jeffreys; *T. costellata*, Couth. (fig. 48); *T. inermis*, Hinds (fig. 52); *Fusus Laskeyi*, Macgill.; *Fusus umbilicatus*, Brown; *T. conica*, Möll. (fig. 45); *T. quadricarinata*, A. Ad. (fig. 44), from Japan; *T. insignis*, Midd., var. of Aurivillius (fig. 59).

T. CLATHRATA, A. Ad. Pl. 7, fig. 51.

Umbilicus narrow, whorls angular, carinated above, cancellated with slightly beaded spiral ribs and interstitial regular, small, longitudinal riblets; epidermis thin, yellowish brown.

New Zealand.

T. inornata, Hutton, is a synonym. I have not seen this species, which so greatly resembles *T. borealis*, but is from an entirely different locality. The figure shows no trace of hairs on the epidermis.

T. CANCELLATA, Hinds. Pl. 7, figs. 49, 50.

Umbilicus small, whorls about 7, well rounded, with elevated spire, with a number of spiral ribs, obsoletely cancellated here and there by distant longitudinal and less prominent ribs; epidermis light brownish or grayish; aperture often pink.

Length, 1–1·4 inches.

Alaska to Vancouver's Island.

Appears to be peculiar to the west coast of North America, where it replaces *T. borealis*. Jeffreys considers it identical with that species, and as Arctic mollusca are exceedingly variable, this may be so; yet I find no conclusive evidence of it. *T. flavida*, Hinds (fig. 50), belongs here.

T. CORONATA, Gould. Pl. 7, figs. 53, 54.

Umbilicus rather wide and deep, acutely margined; whorls about 6, tabulate and carinate at the angle; epidermis ash-colored, fibrously produced at the angle. Length, 25 mill.

Sts. of Semiavine, Arctic Ocean; Behring's Sea.

The first figure given above is supposed by Krause, who publishes it, to represent the species, but it does not appear to me to agree with the description. Gould never figured it. I have added a figure given by Aurivillius, which is probably a better representation of it, and approaches *T. unicarinata*.

T. UNICARINATA, Brod. and Brod. Pl. 7, fig. 56.

Whorls tabulately shouldered, with a single beaded keel at the angle; umbilicus wide, surrounded by a keel, rest of surface smooth; pinkish, covered by a brown epidermis.

Length, 20 mill.

Japan.

T. CEDO-NULLI, A. Ad. Pl. 7, fig, 55.

Spire elevated, whorls rounded, umbilicus minute or imperforate, cancellated by spiral beaded ribs and longitudinal riblets, columella truncate and a little turned back at the base, epidermis reddish brown. Length, 12 mill.

Japan.

T. FIMBRIATA, Jeffreys. Pl. 7, fig. 57.

Thin, semitransparent, imperforate; whorls 4–5, with spiral ciliated riblets, of which there are 8–10 on the body-whorl; columella straight. Length, 2·5 mill.

Atlantic (Porcupine Exped.).

Evidently a very young shell.

T. DENSISTRIATA, Jeffreys. Pl. 7, fig. 58.

Thin, semitransparent, imperforate; whorls 3–4, rather tumid, with numerous spiral striæ, which are covered by minute, close-set prickles, body-whorl with a shallow peripheral sulcus; columella straight, truncate below. Length, 2 mill.

Cape Verd I.; 1192 fms.

This, like the last, is a very young shell.

T. KROYERI, Phil. Pl. 8, figs. 61, 60, 62–64.

Shell thick, widely umbilicated; whorls 5, with distant spiral ribs; umbilicus encircled by a rib; epidermis yellowish brown. Length, 1·5 inches.

Spitzbergen, Behring's Strait.

The synonyms are *T. Kuzeri*, Phil., and *T. Ruzeri*, Phil., of Reeve and Brazier respectively, both misprints; *T. ciliata*, Kroyer; *T. dolium*, Petit; *T. arctica*, Midd. (figs. 62, 63). Aurivillius has figured an immense specimen of this species (fig. 60), and another, with a tubercle near the base of the columella (fig. 64), which he has distinguished as *T. solida.*

T. INSIGNIS, Middendorff. Pl. 8, fig. 88; ? Pl. 7, fig. 59.

Umbilicus small, shell thick, somewhat globose, with undulating crenulated spiral ribs, two of them usually more prominent, angulating the body-whorl, aperture margin often crenulated, epidermis light yellowish brown. Length, 18 mill.

Behring's Straits.

The second figure is referred to this species as a lengthened variety by Aurivillius; it appears to me more like a variety of *T. borealis.*

Unfigured Species.

T. MIGRANS, Dall. Near *Havana, Cuba.*

Remarkable as the first species of the genus found in tropical waters.

T. PUSILLA, Gould. (= Fossarus).

T. PERAMABILIS, Dall. *Sitka.*

T. INFLATA, Friele. *North Sea.*

T. ELLIPSOIDEA, Gould. *Hong Kong Bay.*

T. d'ORBIGNYANUM, Petit. (= Coralliophila, Manual, ii, 206).

T. TRICARINATA, and T. GRACILENTA, Brazier. *N. Australia.*

T. (ALORA) GOULDII, A. Ad. *Panama.*

Genus SEPARATISTA, Gray, 1847.

S. BLAINVILLEANA, Petit. Pl. 8, fig. 69.

Widely umbilicated, membranaceous, pellucid, under a roseate corneous epidermis; whorls 6, rapidly increasing, broadly tabulate, periphery with two spiral distant ribs on the spire, and three on the body-whorl; aperture transverse, a little channeled below. Diam. 10 mill.

? Marianne Is.

S. CHEMNITZII, A. Ad. Pl. 8, fig. 70.

Spire more depressed than the preceding species, with fewer whorls, which are convex, the three peripheral keels closer and not so prominent as in the last species. Diam. 18 mill.

Philippines.

S. GRAYI, A. Ad.

Spire depressed; whorls with five keels; aperture transversely oblong; inner lip reflexed, anteriorly rounded. Unfigured.

Cape of Good Hope.

Genus TORELLIA, Lovén, 1867.

T. VESTITA, Jeffreys. Pl. 8, fig. 66.

Narrowly umbilicated, subglobose, rather thin, semitransparent, chalky white, under a pale yellowish brown, velvety epidermis; whorls 5–6, tumid, rapidly enlarging, with numerous fine spiral and less conspicuous longitudinal striæ; aperture nearly entire, round. Diam. 15 mill.

Norway, Shetland, Martha's Vineyard, etc.

First described by Jeffreys as *Recluzia aperta*.

T. DELICATA, Phil. Pl. 8, fig. 67.

Narrowly umbilicated, very thin; whorls 6, well-rounded, with deep suture, very finely reticulated by longitudinal and spiral striæ.

Messina, Sicily.

T. FIMBRIATA, Verrill and Smith. Pl. 8, fig. 68.

Narrowly umbilicated, thin, fragile, suture deep; whorls 5, very convex, rapidly enlarging, with spiral, hairy carinæ, about ten of them on the last whorl, the interspaces finely, nodulously reticulated by growth and spiral lines; columella callously thickened below. Diam. 17 mill.

Off Martha's Vineyard, Mass.

Var. TIARELLA, Verrill.

Subsutural carina well developed and hairy, the other carinæ nearly obsolete.

Genus SEGUENZIA, Jeffreys, 1876.

S. MONOCINGULATA, Seguenza. Pl. 8, figs. 71–73.

Imperforate; whorls with revolving ribs, of which the last has about four distant prominent ones, besides minor striæ on the base; white. Length, 6 mill.

N. Atlantic, New England, Bay of Biscay, S. W. of Bermudas, Gulf of Mexico.

S. formosa, Jeffreys, is a synonym.

Var. LINEATA, Watson. Figs. 72, 73.

Same localities as the type.

Var. NITIDA, Verrill.

Thinner, more translucent, with less acute spire, and more delicate sculpture, the spiral lines on the base more numerous and closer.

S. ERITIMA, Verrill. Pl. 8, fig. 74.

Sculpture more delicate, carinæ less acute, riblets finer and closer, basal lines finer and more numerous than in the preceding species; it is also narrowly umbilicated. Length, 4·5 mill.

Off *New England*, 1290, 1467 and 2033 fms.

S. ELEGANS, Jeffreys. Pl. 8, fig. 75.

Umbilicated, shorter, more globose than *S. eritima*, lip fissure close to the suture, columella produced below, aperture broadly truncately sinuous on the base. Length, 3 mill.

Bay of Biscay.

S. TRICARINATA, Jeffreys. Pl. 8, fig. 76.

Umbilicus narrow, slightly keel-margined; depressed-globose, convexly shouldered above, then three-keeled; lip fissure wide and shallow, aperture narrowly produced at the base; white. Length, 2 mill.

Off *Cape Verd Is.;* 1192 fms.

Not adult.

S. IONICA, Watson. Pl. 8, figs. 77, 78.

Umbilicated, depressed trochiform, with two strong spiral ridges and a number of basal striæ—most distinct around the outer margin, and surrounding the umbilicus. Diam. 6 mill.

W. of Azores; West Indies.

S. TRISPINOSA, Watson. Pl. 8, figs. 79, 80.

Umbilicated, elevated trochiform, suture deep, with three rather close tubercular spiral ridges, base with numerous spiral striæ, the outer one much more distinct. Diam. 3·75 mill.

Pernambuco.

S CARINATA, Jeffreys. Pl. 8, figs. 81–83.

Umbilicated, rather smooth, with a single peripheral carina, showing at the base of the spire-whorls, base nearly smooth. Diam. 4 mill.

N. Atlantic, Bay of Biscay, Canaries, Azores, Pernambuco.

S. RETICULATA, Phil. Pl. 8, figs. 84, 85.

Umbilicated, trochiform, periphery acutely angulated, elegantly granularly reticulated, base smooth, obsoletely cingulated at the periphery. Diam. 2·5 mill.

Portugal; off *Ascension I.; West Indies.*

Fossil, pliocene of Calabria.

It is *Trochus* (*Solariella*) *Lusitanica*, Fischer.

S. LAXA, Jeffreys. Pl. 8, figs. 86, 87.

Shell consisting of scarcely two whorls, which are cylindrical and scalariform, regularly spirally striated; mouth nearly detached, quadrangular, a little produced at the base; umbilicus narrow and deep. Length, 6 mill.

Atlantic (Porcupine Exped.).

Only a fragment obtained. Its generic position is very doubtful.

S. DELICATULA, Dall. (unfigured). *Gulf of Mexico.*

Family *SCALARIIDÆ.*

Animal having a retractile proboscis; tentacles close together, long and pointed, the eyes on slight elevations near their outer bases; mantle-margin simple, with a rudimentary siphonal fold; foot truncated in front, extending far in advance of the head. Jaws oval or semicircular, spiny, or denticulated only on the margin; radula composed of elongated unciform or aciculated teeth, many in a series (Pl. 11, fig. 30). Sexes distinct.

Shell usually white and polished, turriculated, perforate, but the umbilicus frequently covered by an expansion of the inner lip-margin; whorls numerous, convex, usually loosely coiled, often barely or not at all in contact; aperture entire, circular or oval. Operculum corneous, few-whorled, nucleus nearly central.

These mollusks are somewhat closely allied to the Ianthinæ, of which they may be regarded as creeping representatives. The form of the shell remotely suggests Turritella.

Synopsis of Genera.

Genus SCALARIA, Lam., 1801.

Shell mostly pure white and lustrous, umbilicated or imperforate; spire elongated, the apex more or less inflected; whorls numerous, rounded, in contact or separated, ornamented with longitudinal ribs or thin lamellæ, often continuous across the suture; peristome entire, thickened, reflected. Animal as in the family description. They are predaceous. Dr. Gould fed them on raw beef, which they eat voraciously. They exude a purple fluid when irritated.

The genus commenced in the Trias, and has continued its development to the present time; about 200 fossil species have been described, and not far from the same number recent. They are found from low water to 80 or 100 fathoms and occur throughout the world, the Arctic seas furnishing representations of peculiar type; but the largest, finest and most typical species

are tropical. The West Indian province appears to be the metropolis of the genus; at least more species have been described from that than from any other region. The name indicates a fancied resemblance to a ladder; in the vernacular the shell is usually known as "Wentle-trap." The synonyms include *Scala*, Klein, 1753; *Cyclostoma*, Lam., 1799, and *Sthenorytis*, 1868; *Compsopleura* and *Scalina*, 1865, by Conrad, the three last proposed (but not described) for American tertiary fossils.

A number of genera and subgenera have been described, based upon characters of secondary importance, and which can be mostly advantageously reduced to the rank of sections.

Section SCALARIA (*sensu stricto*).

Whorls a little separated, crossed by regular lamelliform varices, umbilicated. *Aciona*, Leach, 1815, is a synonym.

Section CLATHRUS, Oken, 1815.

Shell moderately thick, often colored, whorls united, longitudinal ribs usually numerous, aperture suboval, umbilicus covered by the left lip, no basal rib. *Janthoscala* and *Turbona* (Brown), Mörch, 1876, published without diagnosis, appear to include species of this section.

Section OPALIA, H. and A. Adams, 1853.

Shell turriculated, imperforate, whorls united, the last with a basal spiral rib. To this group may be referred *Psychrosoma*, Canefri, 1876, and perhaps *Compsopleura* (Am. tertiary), Conrad, 1865.

Section AMÆA, H. and A. Adams, 1853.

Shell turriculated, thin, whorls united, cancellated, with some thin, irregular varices; aperture semilunar, inner lip gibbous in the middle, outer lip thin, simple.

Section CIRSOTREMA, Mörch, 1852.

Shell turriculated, solid, whorls cancellated, with a few irregular, thick, crispate varices; aperture bordered by a thick crenulated varix.

Section ACIRSA, Mörch, 1857.

Shell turreted, thin, whorls united, varices obsolete; lip thin, simple. *Arctic Seas.*

Section ACRILLA, H. Adams, 1860.

Shell moderately thick, turritelliform; whorls united, with very numerous filiform ribs, last whorl with subcarinated periphery; lip of aperture thin.

Subgenus CONSTANTIA, A. Adams, 1860.

Shell small, perforate or imperforate, oval, with elate spire; whorls rounded, decussated by thin longitudinal plications and revolving elevated liræ; aperture oval, margin free, continuous, acute.

Subgenus CROSSEIA, A. Adams, 1865.

Shell turbinate, umbilicated, white; whorls convex, in contact, cancellated, simple or with distant varices; aperture somewhat produced and channeled in front; umbilicus surrounded and restricted by a callus. *Japan.*

Genus SCALIOLA, A. Adams, 1860.

Shell turriculated, whorls in contact, without varices, agglutinating to the surface minute particles of sand, etc. Animal with elongated, cylindrical, annulated rostrum, eyes prominent, black, foot short, oval, acuminated behind. Operculum corneous, oval, subspiral, with subterminal nucleus. *Japan.*

Genus FUNIS, Seeley, 1861.

Shell turreted, thin; whorls with lamelliform ribs, and usually also with spiral striæ, so as to produce a cancellated surface; aperture ovate, margin thin, produced below. Characters intermediate between Scalaria and Turritella.

F. ELONGATA, Seely. Fossil in the Cambridge Greensand, *England* (Struct. and Syst. Conch., t. 67, f. 46).

Genus EGLISIA, Gray, 1840.

Shell imperforate, elongated, solid; whorls numerous, rounded, spirally grooved, with indications of longitudinal varices; aperture small, orbicular, columellar lip curved, thick, flattened and

angulated in front, umbilical region filled by a twisted funiculum. Operculum corneous, few-whorled, with subcentral nucleus.

Europe, *West Coast of Africa*, *West Indies*, *Indian Ocean*, *Japan*.

Smithia, Maltzan, 1883, is a synonym.

This genus has usually been arranged with the family Turritellidæ.

Genus ACLIS, Lovén, 1846.

Animal with long, retractile proboscis, tentacles close together at the base, slender, cylindrical, eyes sessile at their external bases; foot truncate; mentum narrower than the sole, and extending far beyond the head; operculigerous lobe ample, unsymmetrical. Radula of numerous, simple, aculeiform teeth. Shell narrowly umbilicated or rimate, small, turreted, subulate, smooth, or usually with spiral riblets; aperture oval, entire, the peristome not continuous, lip thin, simple. Operculum corneous, thin, ear-shaped, paucispiral, with marginal nucleus.

Aclis resembles Turritella in form, but is much smaller and umbilicated. A few living forms are found in European seas, and a dozen fossil species, commencing with the Devonian, are also referred to the genus.

Ebala (Leach), Gray, is a synonym.

Section ACLIS (*sensu stricto*).

Shell spirally sulcate.

Section HEMIACLIS, Sars., 1878.

Shell smooth, spire elongated, a little conical, apex regular, obtuse; base a little dilated, aperture rather large.

Section GRAPHIS, Jeffreys, 1867.

Cylindrical, longitudinally striated or reticulated; spire elongated, apex obtuse and twisted; aperture oval, contracted. *Cioniscus*, Jeffreys, 1869, is a synonym; the earlier name was unnecessarily changed on account of being preoccupied in lichens.

Section PHERUSA, Jeffreys, 1869.

Shell subcylindrical, smooth, subperforate; apex obtuse, twisted, but not sinistral; aperture angulated at the base, lip

sharp, sinuous. *Menippe*, Jeffreys, 1867, is a synonym, preoccupied in Crustacea.

Section IOLÆA, A. Adams, 1860.

Shell umbilicated, turriculated or subulate; whorls slightly convex, spirally sulcate, with fine longitudinal striæ in the interstices; aperture oblong, acuminated behind, rounded in front, lip free, simple.

Section ACTÆONEMA, Conrad, 1865.

Shell slightly umbilicated, conical; whorls numerous; aperture suboval, rounded and reflected at the base, lip not continuous, sharp. *Cælatura*, Conrad, 1865, is a synonym.

A. STRIATUM, Lea. Eocene of Alabama.

Genus STILBE, Jeffreys, 1884.

Shell conical, elongated, smooth, shining, apex regular and sharp; whorls numerous, but slightly convex; aperture suboval, angulated in front and behind, lip sharp. *Atlantic Ocean;* abyssal.

Jeffreys has placed this group in Turritellidæ; it appears to be more nearly related to Aclis.

Genus HOLOPELLA, M'Coy, 1852.

Shell elongated, slender, of numerous gradually increasing convex whorls, with deep suture, usually arcuately striate, or smooth, sometimes reticulated; aperture circular, with continuous peristome; base rounded, with or without a minute umbilicus

Silurian-Triassic. H. GREGARIA, Sowb.

About a dozen species are known. *Aclisina*, de Koninck, 1881, is a synonym.

? Genus ELASMONEMA, Fischer, 1885.

Shell sometimes elongated, sometimes short or globular, with rather distant, sublamellar longitudinal striæ; whorls convex; mouth circular, lip continuous, thin.

Silurian. E. SCALARIFORME, Lindström.

The name is proposed instead of *Callonema*, Hall, 1879, not Conrad, 1873; but if the latter is really, as suspected, a synonym of *Spironema*, Meek, 1864, Hall's name might be retained.

Scalaria has been monographed by:
Kiener, Iconog. Coq. vivantes. 20 species. (No date.)
Sowerby, Thesaurus Conchyliorum, i. 93 species. 1847.
Sowerby, in Reeve's Conch. Icon., xix. 125 species. 1874.

Besides these, Mörch has published in the Journal of the Philadelphia Academy, viii, 1876, an important paper on the West Indian species, based principally on the study of the specimens belonging to the Robert Swift collection, in the museum of that institution.

An alphabetical catalogue of the recent and fossil species of Scalaria, published by H. P. Nyst in the Annales de la Soc. Malacol. de Belg., vi, 1873, includes 162 living, 161 tertiary, 51 cretaceous and 4 jurassic species.

Genus SCALARIA, Lam., 1801.

Section SCALARIA (*sensu stricto*).

S. PRETIOSA, Lam. Pl. 11, fig. 31.

Widely umbilicated, smooth, polished, usually fleshy white, the ribs ivory-white; whorls 8, rounded. Length, 2·5 inches.

China, *Australia*, *Moluccas*.

This is the well-known "precious wentletrap," the *Turbo scalaris*, of Linnæus.

S. CRENULATA, Pease. Pl. 11, fig. 32.

Umbilicated, smooth, white; whorls 4, separated by a deep, wide suture; lamellæ 6, crenulated on the edge. Length, 5 mill.

Tahiti.

At first sight appears like a diminutive *S. pretiosa*, but is wider, with less numerous, crenulated varices.

S. PALLASI, Kiener. Pl. 11, fig. 33.

Shell narrower than *S. pretiosa*, with narrower umbilicus, fleshy white between the ribs; whorls 8, somewhat disunited, lamellæ more numerous than in *S. pretiosa*, usually slightly hooked at the top of the whorls. Length, 1·5 inches.

China, *Philippines*, *Mauritius*.

The synonyms are *S. neglecta*, Reeve (not Adams and Reeve); *S. subpretiosa*, Blainv.; *S. notha*, Menke, and *S. Nicobarica*, Beck, MS.

S. NEGLECTA, Ads. and Reeve. Pl. 11, figs. 34, 35.

Umbilicated, pale fawn-color, the ribs white; whorls 7–8, rounded, rather numerously lamellate, the lamellæ uncinated at the top of the ribs. Length, 1·25 inches.

China Sea.

S. inclyta, Melvill (fig. 35), appears to me to be an old, well-grown specimen of this form; the author distinguished it from *S. neglecta*, but apparently has taken Reeve's incorrect identification of that species (see preceding description).

S. IMPERIALIS, Sowb. Pl. 11, fig. 36.

Narrowly umbilicated, fawn-color between the white lamellæ, which are numerous and rather close; whorls about 8, well rounded, rapidly increasing. Length, 1·25 inches.

Mozambique; Swan River, Australia.

S. BULLATA, Sowb. Pl. 11, fig. 37.

Narrowly umbilicated, short and broad, very ventricose; whorls 6, very rapidly increasing, with oblique lamellæ, somewhat uncinate at the suture. Length, 20 mill.

Ins. Capul, Philippines.

S. OBESA, Sowb. Pl. 11, figs. 38, 39.

Whorls 6, ventricose, rather solid, contiguous, with numerous, thick, rounded lamellæ; margin of aperture usually fulvous. Length, 16 mill.

Australia.

S. ALATA, Sowb. Pl. 11, fig. 40.

Narrowly umbilicated, white, often broadly diffusely banded with fawn-color; whorls 7, not in contact, with distant, thin lamellæ, angulated above, with somewhat pointed angle. Length, ·5–·75 inch.

Singapore, Philippines, Viti Is.

S. FASCIATA, Sowb. Pl. 11, fig. 41.

Umbilicus nearly covered, white, single-banded with brown between the varices; whorls 7, rounded, hardly touching, lamellæ acuminately angled above. Length, 23 mill.

Ins. Luzon, Philippines.

S. MARMORATA, Sowb. Pl. 11, fig. 42.

Scarcely umbilicated, marbled with brownish between the lamellæ; whorls 8–9, obtusely angulated above, the varices also angulated, narrow and thin. Length, 1 inch.

India.

Differs from the preceding species by its more numerous, angulated whorls, thinner and more irregular varices, and coloring.

S. REPLICATA, Sowb. Pl. 11, fig. 43.

Scarcely perforate, stout, white; whorls 6, a little disunited, lamellæ rather distant, recurved, uncinate near the suture. Length, 19 mill.

Lord Hood's Isl.; Kingsmill Is.

S. TENUICOSTATA, Sowb. Pl. 11, fig. 44.

Almost imperforate, thin, subventricose; whorls 8, with thin lamellæ, uncinate above. Length, 20 mill.

Ins. Luzon, Philippines.

S. CLEMENTINA, Grateloup. Pl. 11, figs. 48, 47.

Narrowly umbilicated, short, ventricose, fawn color, with three narrow chestnut bands, lamellæ white; whorls 6, rounded, lamellæ numerous, unequal. Length, 19 mill.

Singapore; Philippines.

S. trifasciata, De Haan (fig. 47), is a synonym. The bands are sometimes faint or obsolete.

S. LATIFASCIATA, Sowb. Pl. 11, figs. 45, 46.

Spire longer than in the preceding species, with broad chestnut bands. Length, 23 mill.

Mauritius.

S. BULBULUS, Sowb. Pl. 11, fig. 49.

Subimperforate, short, ventricose, fawn color; whorls 5, rounded, contiguous, with rather distant, slightly arched, rounded, white lamellæ. Length, 13 mill.

Hab. unknown.

S. OPTABILIS, A. Ad. Pl. 11, fig. 50.

Subimperforate, short, ventricose, whitish, interruptedly two-banded, appearing like two rows of spots; whorls 6, the lamellæ rounded, equal, rather distant. Length, 12 mill.

Hab. unknown.

S. TENUILIRATA, Sowb. Pl. 11, fig. 51.

Perforate, purple brown between the varices; whorls 6, rounded, rapidly increasing, with deep suture, lamellæ very close, unequal, thin, rounded, reflected. Length, 12 mill.

Japan.

S. LAXATA, Sowb. Pl. 11, fig. 52.

Narrowly umbilicated, thin, smooth, white; whorls 6, much disunited, with numerous, thin, scarcely regular lamellæ. Length, 20 mill.

Ins. Luzon, Philippines.

S. HYALINA, Sowb. Pl. 11, figs. 53, 54.

Widely umbilicated, solute, smooth, thin, pellucid, white; whorls 6, with distant, crenulated varices. Length, 18 mill.

Ins. Luzon, Philippines; Singapore.

S. SOLUTA, Dunker. Pl. 11, fig. 55.

Umbilicated, white; whorls 5, well rounded, disunited, with about ten crenulated white lamellæ, usually four-lobed in the last whorl. Length, 5 mill.

St. Thomas, West Indies.

S. SEMIDISJUNCTA, Jeffreys. Pl. 11, fig. 56.

Subimperforate, corkscrew-shaped, white; whorls 7–8, flat-shouldered, with close-set, flexuous, sharp lamellæ, the interstices very finely spirally striated. Length, 12·5 mill.

Azores, 2199 fms.

S. VERMETIFORMIS, Watson. Pl. 18, fig. 74.

Solute, thin, white; whorls 6, rounded, with numerous low, fine, sinuous lamellæ, and fine spiral lines. Length, 6 mill.

Off *Pernambuco* (350 fms.).

S. PRINCIPALIS, Pallas. Pl. 12, fig. 58.

Narrowly umbilicated, thick, white, irregularly spirally striated; whorls 8–10, well rounded, scarcely in contact, with rather numerous, low lamellæ. Length, 1·75 inches.

Tortola, W. Indies.

S. COSTULATA, Kiener. Pl. 12, fig. 59.

Narrower, with more numerous, lower lamellæ than the preceding species, but possibly only a variety. Length, 34 mill.

W. Columbia (Cuming).

S. STATUMINATA, Sowb. Pl. 12, fig. 60.

Narrowly perforated, short, thick, whitish; whorls 8, round-shouldered, with few, thick, obliquely continuous varices.

Length, 15 mill.

Payta, Peru.

S. OBTUSA, Sowb. Pl. 12, fig. 61.

Subimperforate, rather ventricose, white; whorls 6–7, convex, contiguous, with rather numerous, thin lamellæ, obtusely angular above. Length, 18 mill.

St. Elena, W. Co. Central America.

S. KREBSII, Mörch. Pl. 12, figs. 62, 63.

Narrowly umbilicated, polished, irregularly spirally striated, white, light fulvous about the middle of the whorls; whorls 5–6, scarcely joined, convex, slightly plane above, lamellæ ten, a little uncinate at the suture. Length, 17 mill.

St. Thomas and St. Martin, W. Indies.

S. SWIFTII, Mörch. Pl. 12, fig. 64.

Scarcely perforate, white, polished, with very obsolete spiral striæ; whorls 7–8, with rimate suture, lamellæ about twelve, subcontinuous, not produced above. Length, 14 mill.

St. Thomas, W. I.

S. INCONSPICUA, Sowb. Pl. 12, fig. 65.

Narrowly umbilicated, ventricose, short, white; whorls 6, well rounded, with numerous, close, very thin lamellæ.

Length, 13 mill.

West Indies.

Mörch indicates a var. INFLATA. L. 9, lat. 5·5 mill.

S. NANA, Jeffreys. Pl. 12, fig. 66.

Narrowly umbilicated, semitransparent, not glossy, whitish, with a few spiral striæ; whorls 7–8, convex, with about thirty close lamellæ. Length, 3·75 mill.

Bay of Biscay.

S. BREVIS, d'Orbigny. Pl. 13, fig. 4.

Widely umbilicated, thin, whitish; whorls 4, obtusely angulated on the periphery, spirally striate, with narrow, distant, low lamellæ. Length, 1 mill.

Falkland Is.

Evidently a very young shell.

S. CRASSA, Sowb. Pl. 11, fig. 57,

Slightly umbilicated, white, smooth; whorls 6, well rounded, slowly increasing, with rather numerous, thin, low varices.

Length, 22 mill. *Philippines.*

S. LYRA, Sowb. Pl. 12, fig. 69.

Narrowly umbilicated, whitish, with close, very thin lamellæ, white, two- or three-banded with chestnut; whorls 7, rounded, contiguous. Length, 22 mill.

Japan, Philippines, Viti Is.

Differs from *S. Clementina* and *S. latifasciata* by its thin, numerous lamellæ. *S. lineata*, Kiener (in part), is a synonym.

S. LINEOLATA, Sowb. Pl. 12, fig. 81.

Narrowly umbilicated, fulvous, two-banded with chestnut between the lamellæ; whorls 8, well rounded, with numerous, thin, rounded, white lamellæ. Length, 1 inch.

Philippines, Japan.

S. MARIEI, Crosse. Pl. 12, fig. 87.

Subimperforate, whitish, maculated with chestnut in about three spiral series; whorls about 7, separated, with very distant, low, small lamellæ. Length, 22 mill.

New Caledonia.

S. AURITA, Sowb. Pl. 12, fig. 84.

Narrowly perforate, pale fawn-color between the ribs, spirally two-banded with chestnut; whorls 8, well rounded, with thin, arched, rather distant decumbent varices, joined at the suture.

Length, 22 mill. *Coast of Coromandel; Japan.*

Narrower than the preceding species.

S. GLABRATA, Hinds. Pl. 12, fig. 85.

Narrowly perforate, yellowish with three interrupted series of chestnut maculations or bands between the lamellæ; whorls about 9, well rounded, with distant, white, continuous lamellæ.

Length, 20 mill. *Sts. Macassar; Malacca.*

S. MACULOSA, Ads. and Reeve. Pl. 12, fig. 86.

Narrowly perforate, yellowish with chestnut maculations between the varices; whorls about 9, with distant lamellæ, slightly angulated and aculeate above. Length, 10 mill.

China Sea.

S. RUBROLINEATA, Sowb. Pl. 12, figs. 82, 83.

Narrowly umbilicated, thin, yellowish white, two-banded with light chestnut, the upper band narrower and fainter, sometimes obsolete; whorls 5, well rounded, with rather numerous, thin, erect lamellæ. Length, 15–20 mill. *Australia, Philippines.*

S. DUBIA, Sowb. Pl. 12, figs. 67, 68.

Moderately umbilicated, white; whorls 9, well rounded, contiguous, with numerous thin, thread-like, low lamellæ and scarcely perceptible spiral striæ. Length, 1·5 inches.

Port Essington, Australia.

The original description was from a young specimen; the adult was described by Gray, three years subsequently, under the name of *S. striata* (fig. 68).

S. UNDULATISSIMA, Sowb. Pl. 12, fig. 70.

Perforate, thin, white, very minutely spirally striated, with close fine undulated lamellæ, a little aculeate at the top of the whorls; whorls 9, well rounded, slightly shouldered at the suture. Length, 1 inch. *Habitat unknown.*

S. IRREGULARIS, Sowb. Pl. 12, fig. 71.

Umbilicated, white, thin, with very thin, numerous irregular varices, a little aculeated above; whorls 6, well rounded, contiguous. Length, 22 mill. *Philippines.*

Very closely allied to *S. dubia;* the figure, however, represents closer, coarser lamellæ than in that species.

S. SIMILIS, Sowb. Pl. 12, fig. 72.

Narrowly umbilicated, thin, white, very minutely spirally striated; whorls 6, contiguous, lamellæ close and thin.

Length, 18 mill. *Philippines.*

S. SMITHII, Tryon. Pl. 12, fig. 73.

Fulvous grayish, very finely spirally striated; whorls 8, rounded, the last somewhat inflated, with close, thin lamellæ.

Length, 14 mill.

Whydah, W. Africa.

This species was described as *S. miranda*, E. A. Smith, and the name is changed on account of the previously published *Crosseia miranda*, A. Ad.

S. CATANUANENSIS, Sowb. Pl. 12, fig. 74.

Shell ventricose, with seven rounded whorls, yellowish brown with very small, close, thin varices, and a conspicuous one on the back, near the aperture, minutely decussated by spiral striæ.

Length, 12 mill.

Catanuan, Philippines.

In Conchologia Iconica, the figures of this species and of *S. pulcherrima* have been transposed.

S. IMMACULATA, Sowb. Pl. 12, fig, 80.

Subumbilicated, minutely spirally striate, whitish; whorls about 9, rounded, contiguous, with rather numerous, very thin, unequal lamellæ, disappearing about the middle of the whorls, and crispate at the suture. Length, 1 inch.

Philippines.

S. FRIABILIS, Sowb. Pl. 12, fig. 75.

Scarcely umbilicated, very thin, white; whorls 8, but slightly convex, the suture not deeply impressed, with very thin, close lamellæ, aculeate close to the suture. Length, 20 mill.

Swan River, Australia.

S. CRISPATA, Pease. Pl. 12, fig. 79.

Subimperforate, thin, white, finely spirally striated; whorls 8–9, convex, contiguous, the last whorl slightly ventricose, with numerous, close, small, thin, crenulated lamellæ.

Length, 20 mill.

Paumotus Is.

S. INDISTINCTA, Sowb. Pl. 12, fig. 76.

Subimperforate, rather solid, white, minutely spirally striated; whorls 9, well rounded, with very fine close lamellæ, a little crispate at the suture. Length, 23 mill.

Gulf of California.

S. TENUISTRIATA, d'Orb. Pl. 14, fig. 52.

Subimperforate, thin, whitish; whorls 8, convex, subcancellated by very numerous close lamellæ and fine spiral striæ.

Length, 16 mill.

Bahia Blanca, Buenos Ayres.

S. TENERA, H. Adams. Pl. 12, fig. 77.

Subimperforate, thin, very finely spirally striated, white; whorls 9, well rounded, with numerous close, thin lamellæ, a little

crispate at the suture and almost disappearing on the middle of the whorls. Length, 7 mill.

Philippines.

Described by H. Adams as *S. delicatula*, a name preoccupied by Crosse and subsequently changed as above by Adams, and a year later to *S. subnudata*, by Sowerby.

S. Jeffreysii, Tryon. Pl. 12, fig. 78.

Slightly umbilicated, thin, semitransparent, glossy, whitish, with a few delicate, rounded, spiral striæ, more conspicuous towards the base of each whorl; whorls 10–12, convex, with moderate suture, with about 25–30 low, rounded riblets, inconspicuous or obsolete on the body-whorl. Length, 12 mill.

Atlantic O. (Porcupine Exped.).

Described by Dr. Jeffreys as *S. tenera*, preoccupied (see preceding species).

S. formosissima, Jeffreys. Pl. 17, fig. 34.

Narrowly umbilicated, very thin, nearly transparent, rather glossy, white; whorls 12, convex, narrowly, slopingly shouldered, with 40–50 crowded, slight riblets, closely decussated by thread-like spiral striæ. Length, 15 mill.

Azores.

S. pyramidalis, Sowb. Pl. 13, fig. 89.

Narrowly umbilicated; whorls 9, well rounded and scarcely in contact, with rather distant lamellæ, narrowly angulated and produced at the top of each whorl. Length, 1·25 inches.

Philippines.

Section Clathrus, Oken, 1815.

S. gradata, Hinds. Pl. 13, fig. 88.

Whorls 12, slowly increasing, narrow-shouldered above, lamellæ numerous, oblique, a little produced on the angle of the shoulder. Length, 1·5 inches.

Amboyna.

S. nodosa, Cpr. MS., in Brit. Mus., is a synonym.

S. Austro-Caledonica, Montr. Pl. 13, fig. 94.

Whorls thin, 8 or 9 in number, separate, joined by 7 strong lamellæ, which are shouldered and aculeate at the top of each whorl; white, with a single irregular chestnut band.

Length, 23 mill. *New Caledonia.*

S. ACULEATA, Sowb. Pl. 13, figs. 90, 91.

White, narrow, with eight contiguous whorls, and rather distant erect lamellæ, slightly produced and aculeated above, near the suture. Length, 15–18 mill.

Philippines, Hong Kong, Malacca.

S. EXIMIA, Ad. and Reeve. Pl. 13, fig. 92.

Pale fulvous, spirally striated; whorls 10, narrow-shouldered above, with regular white lamellæ; aculeate at the shoulder angle. Length, 8 mill.

China Sea.

S. PORRECTA, Hinds. Pl. 13, fig. 93.

Imperforate, yellowish brown, aperture yellowish; whorls 8, turreted, with numerous, rather thick lamellæ. Length, 10 mill.

Straits of Malacca.

S. MURICATA, Risso. Pl. 13, fig. 95.

Whorls 8, distinctly shouldered, the somewhat distant, rather broad lamellæ expanded and aculeate on the shoulder. Length, 18 mill.

Mediterranean Sea.

S. MITRÆFORMIS, Sowb. Pl. 13, fig. 1.

Similar to the preceding species, but with the lamellæ more numerous, narrower, and forming smaller, sharper points at the angle. Length, 18 mill.

Guacomayo, W. Coast of Cent. America.

S. FOLIACEICOSTA, d'Orb. Pl. 13, fig. 96.

Imperforate, somewhat solid, whitish, a little shining; whorls 11, almost distinct, with six or seven lamellæ, broadened above and aculeate. Length, 15 mill.

West Indies.

S. OCCIDENTALIS, Nyst. Pl. 13, fig. 97.

Thin, smooth, white; whorls 8–9, almost separate, with thirteen or fourteen oblique continuous lamellæ, excavated on the narrow shoulder and aculeate. Length, 13 mill.

West Indies.

The name is substituted for *S. tenuis*, Sowb. (non Gray).

Var. AURITA, Mörch.

Lamellæ eleven, thicker. Length, 11 mill.

A young shell.

Var. Blandii, Mörch.

Perforate, the suture less open, lamellæ ten, with smaller and more numerous lobes.

S. centiquadra, Mörch. Pl. 13, figs. 99, 100.

Thin, white, decussated by fine growth-lines and spiral striæ, the latter usually alternating larger and smaller; whorls about 8, with ten or eleven subcontinuous lamellæ. Length, 15 mill.
West Indies.

It is *S. denticulata*, Sowb., not Mtg. (fig. 100).

S. vittata, Jeffreys. Pl. 13, fig. 3.

Thin, semitransparent, not glossy, pale yellowish brown, with three chestnut bands on the body-whorl, two on those of the spire; whorls 12–14, moderately convex, with deep suture, with about 15 sharp, rather low lamellæ, aculeate above.
Length, 12·5 mill. *Mediterranean Sea, W. Co. Africa.*

S. Algeriana, Weinkauff. Pl. 13, fig. 2.

White, turreted; whorls about 10, with slight spiral striæ, and fourteen lamellæ, narrowly shouldered and aculeate above.
Length, 6 mill. *Cape Breton; Mediterranean Sea.*
This is *S. coronata* and *S. Schultzii*, Weinkauff, and *S. multistriata*, Phil., not Say.

S. turbinata, Conrad. Pl. 13, fig. 8.

Imperforate, white, body-whorl dilated; whorls about 4, with strong lamellæ, terminating in a prominent angle above.
Length, 8 mill. Near *Beaufort, N. Carolina.*

S. Pourtalesii, Verrill and Smith. Pl. 13, fig. 6.

Pure white, rather stout, with seven well rounded, scarcely united whorls, crossed by about sixteen high, thin, lamellæ, aculeate and angulate below the suture, interstices microscopically spirally striate. Length, 17·5 mill.
Off Martha's Vineyard, Mass.

S. echinaticosta, d'Orb. Pl. 13, fig. 98.

Whorls 6, rapidly enlarging, almost distinct, with about a dozen lamellæ, produced into three or four lobes on each whorl.
Length, 3·5 mill. *West Indies.*

S. PERNOBILIS, Fischer and Bernardi. Pl. 13, fig. 5.

Whorls 5–6, rapidly increasing, ventricose, with deep suture, crossed by 14–15 strong, recurved lamellæ, with undulating edges, and somewhat aculeately produced above.

Length, 40 mill.

Ins. Marie-Galante, W. Indies.

Somewhat resembles, but is very much larger than *S. echinaticosta*, d'Orb. Also related rather closely to S. *turbinata*, Conrad, and *S. Pourtalesii*, Verrill and Smith.

S. FRONDOSA, Sowb. Pl. 13, fig. 7.

Subperforate, whorls 7–8, with about 14, rather stout, erect or slightly recurved lamellæ, a little produced above, forming a narrow shoulder. Length, 20 mill.

Mediterranean, Bay of Biscay.

The synonyms are, according to Dr. Jeffreys: *S. Celesti*, Aradas; *S. pumila*, Libassi; *S. rugosa*, Costa; *S. eximia*, Pecchioli; *S. Pecchioliana*, Issel; *S. Gravitellensis*, Seguenza, and *S. soluta*, Tiberi, 1868, not 1863.

S. PAUMOTENSIS, Pease. Pl. 13, fig. 16.

Thick, smooth, white; whorls 6, rounded, narrowly separated, with seven, stout, regular, continuous, recurved lamellæ.

Length, 9 mill.

Paumotus, Kingsmill and Viti Islands.

S. JAPONICA, Dunker. Pl. 13, fig. 15; Pl. 14, fig. 24.

White, smooth, with seven rounded, scarcely touching whorls, crossed by rather solid, obliquely continuous, subdistant lamellæ.

Length, 15 mill.

Japan.

This is *S. Japonica* of Reeve, not Nyst—the latter being a Constantia and substituted for *S. elegans*, A. Ad., preoccupied.

S. DECUSSATA, Pease. Pl. 13, fig. 14.

Rather thick, white; whorls 6, rounded, narrowly separate, crossed by seven stout, regular, continuous lamellæ, the interstices decussated by very minute raised striæ. Length, 9 mill.

Kingsmill, Viti and Sandwich Islands.

S. ANGUSTATA, Dunker. Pl. 13, fig. 13.

Narrowly turreted, white, whorls rounded, with equal, somewhat distant, continuous lamellæ, a little declining.

Length, 9 mill.

Japan.

S. SYMMETRICA, Pease. Pl. 13, fig 12.

Solid, white; whorls 6, contiguous, spirally striated, with 16 thick, slightly recurved, continuous varices. Length, 8 mill.

Tahiti.

S. GRACILENTA, Gould. Pl. 13, fig. 10.

Shell white, with 9 contiguous whorls, with profound suture, crossed by 16 thin, rather low lamellæ, the interstices minutely, spirally striated. Length, 6·25 mill.

Ins. Mangsi.

S. TEXTURATA, Gould. Pl. 13, fig. 9.

Subperforate, yellowish white; whorls 8, rounded, nearly separate, crossed by nine whitish, elevated reflexed ribs, slightly aculeate above, interstices microscopically decussated.

Length, 5 mill.

Hab. unknown.

One of the species of the Wilkes' Exploring Expedition, possibly Polynesian.

S. PHILIPPINARUM, Sowb. Pl. 13, figs. 18, 19.

Imperforate, white, or fulvous between the lamellæ; whorls about 10, well rounded, crossed by rather distant lamellæ, a little produced above. Length, 1 inch.

Philippines, Australia, Amboyna, etc.

This species is quite common in collections and seems to have a pretty wide distribution. Very probably some of the nearly related forms are really only slight variations and should be united with it

S. JUKESIANA, Forbes. Pl. 14, fig. 20.

Imperforate, white; whorls 9, narrower than the preceding species, separate at the suture, with more numerous, nearly equal lamellæ. Length, 17 mill.

Australia.

S. Wellingtonensis, Kirk, is said to be a synonym, but the specimens received under that name at the Philadelphia Academy, from a distinguished Australian conchologist, appear to = *S. Philippinarum.*

S. SUBAURICULATA, Souverb. Pl. 14, figs. 22, 21.

Whorls 9, narrow, rounded, scarcely in contact, with seven rather solid, oblique, subreflexed lamellæ, interstices microscopically spirally striated. Length, 6·25 mill.

New Caledonia.

I place here as a synonym, but with some slight doubt *S. attenuata*, Sowb. (Fig. 21), a species described without locality, and the name subsequently changed by Canefri to *S. microsoma*, on account of the previously described *S. attenuata*, Pease.

S. GRACILIS, Sowb. Pl. 14, figs. 28, 29.

Whorls 9–10, narrow, well rounded, contiguous, fulvous, with subdistant, continuous, rather thick, white lamellæ, a little aculeate near the suture. Length, 18 mill.

Philippines.

If this species equals *S. subauriculata*, Souverb. described above, its name should take precedence.

S. CASTA, A. Ad. Pl. 14, fig. 23.

White, whorls 8, moderately convex, with distinct suture, the varices numerous, some rather thick, slightly aculeate at the suture. Length, 18 mill.

Japan.

S. CONCINNA, Sowb. Pl. 14, fig. 25.

Whorls 6, rapidly enlarging, contiguous, whitish, with numerous, close, rather thick, simple lamellæ. Length, 15 mill

Ins. Bohol, Philippines.

S. MULTICOSTATA, Sowb. Pl. 14, fig. 26.

Whorls 6–7, somewhat convex, fulvous, contiguous, crossed by numerous, rather thick, unequal, white varices. Length, 14 mill.

Ins. Corrigidor, Philippines.

S. OBLIQUA, Sowb. Pl. 14, fig. 27.

Thin, attenuated, white; whorls 7, rounded, scarcely contiguous, crossed by numerous, close, oblique varices, slightly angular near the suture. Length, 15 mill.

Habitat unknown.

S. MINDOROENSIS, Sowb. Pl. 14, fig. 31.

Whitish, with 5 or 6 rounded contiguous whorls, crossed by numerous, thick, rounded simple varices. Length, 17 mill.

Ins. Mindoro, Philippines.

S. ALBOLINEATA, Sowb. Pl. 14, fig. 30.

Chestnut colored between the varices; whorls 8, crossed by somewhat distant, rather thick, white varices, which are obscurely angular in the centre. Length, 14 mill.

Hab. unknown.

Said to resemble *S. Philippinarum*, but with the whorls less separated, and the varices slightly angular in the middle.

S. PULCHERRIMA, Sowb. Pl. 14, fig. 32.

Brownish purple; whorls 6, rapidly enlarging, slightly convex, contiguous, suture not deep, lamellæ numerous, oblique, white, acuminately lobed at the suture. Length, 12 mill.

Philippines.

This is *S. Catanuensis* of Reeve's plate but not of the description, the numbers of that species and of *S. pulcherrima* having been transposed on the plate.

S. PUMILA, A. Ad. Pl. 14, fig. 33.

Shell minute, rather short, ventricose, pale fulvous; whorls 6, rounded, distinct, with rather thick, rounded, approximate white varices. Length, 15 mill. (magnified?)

Japan.

S. CREBERRIMA, Hinds. Pl. 14, fig. 34.

Pale grey, smooth; whorls 6, well rounded, with numerous close, rather prominent lamellæ. Length, 15 mill.

New Guinea.

S. LACTEA, Krauss. Pl. 14, fig. 35.

Minute, whorls 9, white, with crowded small thin lamellæ, suture profound. Length, 8 mill.

Cape of Good Hope.

S. SULCATA, Sowb. Pl. 14, fig. 36.

Thin, white, minutely spirally striated; whorls 7, narrow, rounded, with moderate suture, and numerous, close, thin lamellæ.

Length, 18 mill.

Ins. Luzon, Philippines.

S. SUBTILIS, Sowb. Pl. 14, fig. 38.

Narrow, brownish, spirally minutely striated; whorls about 8, moderately convex, contiguous, slowly increasing, the lamellæ close, minutely crenulated. Length, 11 mill.

Philippines.

S. VESTALIS, Hinds. Pl. 14, fig. 37.

Whitish, very minutely spirally striated; whorls 6, rounded, crossed by numerous, close, minute, simple varices. Length, 14 mill.

New Guinea.

S. DELICATULA, Crosse. Pl. 14, fig. 39.

Thin, narrow, acuminated, very minutely spirally striated; whorls about 11, rounded, crossed by unequal ribs, most of them lamellar, some thickened, simple at the suture. Lengtn, 12 mill.

New Caledonia.

Reeve mentions a keel on the last whorl, but his figure does not show it, and it is neither in the original figures nor the descriptions.

S. OVALIS, Sowb. Pl. 14, fig. 40.

Minute, thick, bluish white; whorls 5, contiguous, somewhat convex, lamellæ oblique, white, thick, not numerous, elevated above the suture; aperture auriform, margin expanded. Length, 5 mill.

Ins. Mindoro, Philippines.

S. CONNEXA, Sowb. Pl. 14, fig. 41.

Pupiform, with obtuse spire, pale purple between the white lamellæ; whorls 5, very slightly convex, lamellæ oblique, white, close, connected. Length, 8 mill.

Ins. Luzon, Philippines.

S. DUCALIS, Mörch. Pl. 14. fig. 47.

Whorls 8, rounded, contiguous, crossed by regular, subdistant strong lamellæ, a little dilated and irregularly joined at the suture. Length, 1 in.

Xipixappi, W. Columbia.

This is not *S. principalis* of Pallas, for which it is erroneously figured in the Thesaurus and Iconica, The name was changed to *S. ducalis* by Mörch in 1875 and to *S. simillima* by Tapparone-Canefri, in 1876. *S. tenuis*, Gray (not Sowerby) is the juvenile.

S. ACICULINA, Hinds. Pl. 14, fig. 42.

Narrow, chestnut brown; whorls 9, rather convex, crossed by somewhat distant, thin, white, lamellæ, subangulated in the middle. Length, 9 mill.

? *W. Coast of America.*

S. POLITA, Sowb. Pl. 14, fig. 43.

Thin, highly polished, pale grey, very narrow, whorls 10, convex, with numerous, close, rather thin lamellæ, obsolete in the middle of the whorls. Length, 22 mill.

Xipixappi, W. Columbia.

S. ELENENSIS, Sowb. Pl. 14, fig. 44.

White, whorls 7, convex, with deep suture, lamellæ about 6, very distant, continuous, slightly plaited at the suture. Length, 10 mill.

St. Elena, W. Columbia.

S. HEXAGONA, Sowb. Pl. 14, fig. 45.

Thick, white; whorls 6, moderately convex, with six strong, oblique, thick lamellæ, Length, 15 mill.

Acapulco.

S. CURVILINEATA, Sowb. Pl. 14, fig. 46.

Whitish, whorls 6, oblong, not very convex, contiguous, lamellæ thin, curvilinear, simple. Length, 15 mill.

Sonsonate, Central America.

S. INDIANORUM, Carp. Pl. 14, figs. 48, 49.

Rather thin, white, whorls 10, rounded, scarcely in contact, with 8—15 (usually about 12) lamellæ, narrowly aculeated at the top of the whorls. Length, 1 in.

Vancouver's Isl.—California.

Var. TINCTA, Carp. Fig. 49.

Costae acute, not reflected, whorls posteriorly tinged with brownish purple.

Southern California.

S. VENOSA, Sowb. Pl. 14, fig. 50.

Smooth, white; whorls 9, separate, with about 11 lamellæ, somewhat reflected and subangulate at the suture. Length, 13—18 mill.

West Indies, Venezuela.

S. MODESTA, C. B. Ad. Pl. 14, fig. 60.

Ventricose, short, pale fulvous; whorls 7, rather convex, with rather distant simple lamellæ. Length, 14 mill.

West Indies.

S. ORBIGNYI, Nyst. Pl. 14, fig. 51.

Solid, white, whorls 9, with very deep suture, lamellæ 14, thick, low, angulated at the suture. Length, 15 mill.

West Indies, Patagonia.

It is *S. elegans*, d'Orb., not Risso.

S. ANGULATA, Say. Pl. 14, fig. 53.

Whorls about 7, subcylindrical, white, separate, with about 9–10, strong lamellæ, slightly angular above.

Connecticut to Florida.

This is *S. clathrus*, Say (not Linn.), and *S. Humphreysiana*, Kiener.

S. GRADATELLA, Mörch. Pl. 14, fig. 54.

Narrow, white, polished; whorls 9, flatly convex, with about 11, low lamellæ, a little angulated above. Length, 12 mill.

West Indies.

Narrow, with more whorls than the preceding species.

S. UNIFASCIATA, Sowb. Pl. 14, fig. 55.

White with a single narrow chestnut band at the suture; whorls about 7, with 6, straight, subcontinuous lamellæ. Length, 15 mill.

West Indies.

S. UNDECIMCOSTATA, Mörch. Pl. 14, fig. 56.

Solid, white or yellowish white, microscopically spirally striate; whorls 6, convex, with deep suture and 11 regular, strong, subcontinuous lamellæ. Length, 10 mill.

W. Indies.

S. EBURNEA, Pot. et Mich. Pl. 14, figs. 57, 58.

Rather thin, smooth, white, shining, with obsolete spiral striae; whorls about 9, very convex, with deep suture, with 12–13 sharp lamellæ. Length, 20 mill.

West Indies.

The synonyms are *S. fragilis*, Hanley (fig. 57) *S. albida*, d'Orb. (fig. 58), and probably *S. ligata*, C. B. Ad. Mörch has mentioned vars. *pumilio* and *angusta*.

S. TERES, Bush. Pl. 14, fig. 59.

Thin, semi-transparent, very shining, bluish white with a delicate pink apex; whorls about 9, very convex, crossed by about 27 very thin, delicate lamellæ, a little oblique, with an almost imperceptible angle at the suture. Length, 4 mill.

Cape Hatteras, N. Car.

S. NOV-ANGLIÆ, Couth. Pl. 15. fig. 62.

Thin, white, with here and there a rusty blotch; whorls cylindrical, barely touching, minutely decussated between the lamellæ; whorls 10, crossed by eleven, somewhat oblique, delicate lamellæ, not continuous, a little aculeate at the top of the whorls. L. 17·5 mill.

A single specimen from a fish, caught off

Cape Ann, Mass.

I know nothing of this species.

S. MULTISTRIATA, Say. Pl. 15, fig. 63.

Thin, white, very minutely spirally striated; whorls 8–9, very convex, crossed by about 15 slightly oblique delicate lamellæ, very slightly shouldered at the top of the whorls. Length, 18 mill.

Southern Coast of the United States.

S. CANDIDISSIMA, Monterosato. Pl. 15, fig. 64.

Narrow, rather thin, white; whorls 9, very convex, crossed by rather distant, simple lamellæ. Length, 15 mill.

Algiers.

Something like *S. eburnea*, Pot. et Mich., but narrower.

S. COMMUNIS, Lam. Pl. 15, figs. 65, 66.

Rather thick, smooth, flesh colored, with light purplish maculations, and usually a basal band of the same color; whorls about 12, scarcely in contact, with about 9 erect, broadly recurved varices, subcontinuous and also maculated. Length, 1·25—1·75 in.

Europe.

It is *S. clathrus* (not of Linnæus), authors, *S. laevigata*, Calcara.

S. TURTONIS, Turton. Pl. 15, fig. 67.

Resembling the preceding species in form and coloring, but the lamellæ flat, instead of raised, some of them much thicker than others, appearing like varices; the ribs are less convex than in *S. communis*. Length, 1—1·5 in.

Europe, Madeira.

The synonyms are *S. planicostata*, Bivona, *S. tenuicostata*, Mich.

S. CANTRAINEI, Weinkauff. Pl. 15, fig. 68.

Flesh color or corneous, trifasciate with brownish; whorls 10, a little flattened, with 12 strong lamellæ, a little coronate at the suture. Length, 5 mill.

Algiers–Bay of Biscay.

S. Kusmici, Brusina and *S. Trevelyana*, Tiberi are synonyms.

S. TREVELYANA Leach. Pl. 15, fig. 69.

Fleshy white, whorls 10, convex, rapidly increasing, with about 16 rather low, somewhat recurved lamellæ, some of them much thicker than the others. Length, 1 inch.

Northern Europe.

S. pseudopulchella, Seguenza is a synonym.

S. CLATHRATULA, Adams. Pl. 15, figs. 70, 61; Pl. 13, fig. 17.

Rather thin, semitransparent, glossy, white, irregularly, indistinctly, spirally striated; whorls 12–13, convex, with deep suture, crossed by about 18, subequal, thin, erect lamellæ. Length, 15 mill.

Europe; *Madeira*; *New England.*

The last locality is for *S. Dalliana*, Verrill and Smith, (fig. 61), dredged by the U. S. Fish Commission, and which Dr. Jeffreys makes a synonym. *S. Georgettina*, Kiener has also been referred here by Dr. Jeffreys, probably correctly.

Var SPINOSA, Jeffreys.

The ribs a little aculeate at the suture.

Var. PRODUCTA, Jeffreys.

Spire longer, ribs much more numerous.

S. HELLENICA, Forbes. Pl. 15, fig. 71.

Narrow, subcylindrical, whorls 8, with low, distant costæ, slightly coronate at the suture, aperture margined. Length, 8 mill.

Mediterranean Sea, Canary Islands.

The figure of *Rissoa coronata*, Phil. which I copy, appears to represent that genus rather than a Scalaria but Dr. Jeffreys makes it a doubtful synonym. He also refers here *S. Scacchii*, Hörnes.

S. PULCHELLA, Bivona. Pl 15, fig. 72.

White, whorls 10, very convex, with close, numerous, slender lamellæ. Length, 18 mill.

Mediterranean Sea.

S. BAIRDII, Smith, Pl. 15, fig. 73.

Bluish white, finely spirally striate; whorls 9, with moderate lamellæ, obsolete in the middle of the whorls, raised into knobs at the suture, where the interstices are somewhat pitted.

Length, 15 mill.

Whydah, W. Africa.

Reeve's figure of this species differs so much from the original illustration that I doubt it; it recalls *S. crenata*, Linn.

S. WEBBII, d'Orb. Pl. 17, fig. 53.

Whorls about 6, convex, spirally striated, with about 23, equal, low, slight lamellæ. Length, 4 mill.

Teneriffe.

Section OPALIA, H. & A. Adams, 1853.

S. DIANÆ, Hinds. Pl. 15, fig. 74.

Whitish, whorls ventricose, smooth, very rapidly enlarging, lamellæ distant, broadly expanded above. Length, 9 mill.

Amboyna.

S. CONSORS, Crosse and Fisher. Pl. 13, fig. 11.

Narrow, whitish, whorls 11, rounded, in contact, with regular simple lamellæ, base with spiral rib. Length, 13 mill.

St. Vincent's Gulf, Australia.

S. PHILTATA, Watson. Pl. 18, fig. 78.

Thin, subhyaline, white; whorls 7, flatly convex with deep suture, with about 25, longitudinal oblique lamellæ, cut across by two or three strong spiral furrows, causing the lamellæ to appear in prickly interrupted series, base with a spiral thread. Length, 2·5 mill.

Tristan d'Acunha, (100 to 150 fms.)

S. LAMELLOSA, Lam. Pl. 15, figs. 84, 76, 77, 82, 83.

Whorls about 8, well rounded, smooth, flesh color, more or less definitely darker banded at the suture and above the basal rib, and intermediately marbled, lamellæ thin, white, blade-like, continuous. Length, 1–1·5 in.

Mediterranean, West Indies, Sandwich Is. Mauritius.

I include here several species which I find it impossible to separate by characters of value. Mörch (Jour. Philad. Acad. VIII, 200) says that the Mediterranean *S. pseudoscalaris*, Brocchi (fig. 77) differs in being narrower, with equal ribs, and that the Polynesian *S. perplexa*, Pease (fig. 83), has single high, alternating with pairs of lower ribs; but both these forms differ widely in series of specimens and are clearly traceable one into another.

I also include here *S. coronata*, Lam. (fig. 76) said by Kiener to come from Cape of Good Hope, and by Mörch believed to be West Indian: it appears to be merely a well-grown *S. lamellosa*, the number of lamellæ varying.

This is *S. clathrus* of Linnæus, 12 Edit. (not 10th Edit.) and of most American authors, and *S. monocycla*, Lam. (fig. 82). Monterosato has given the new name of *commutata* to the Mediterranean specimens because, he says, that of *S. lamellosa* is preoccupied by Brocchi for a large Grignon fossil, and the true *S. pseudoscalaris*, Brocchi is somewhat spinose. It does not seem advisable again to

change the name of this species, so long known as *S. clathrus*, and now equally well-established as *S. lamellosa*. Monterosato has given the name *candida* to a variety.

S. NAUTLÆ, Morch. Pl. 15, fig. 78.

Whorls about 8, convex, with subimpressed suture, lamellæ 12, linear, angularly reflexed at the suture. Length, 12·5 mill.

Mexican Gulf.

S. ANDREWSII, Verrill. Pl. 15, fig. 79.

Whorls 7, well-rounded, white, suture deep, lamellæ 13, regular, moderately elevated, the interstices crossed by spiral cinguli, which also render the ribs a little nodulous. Length, 5·5 mill.

Off Newport, R. I., 100 fms.

S. LONGISSIMA, Seguenza. Pl. 15, fig. 85.

Whorls 11, thick, whitish, closely, lightly, spirally striated, with low, broad longitudinal ribs and equal interspaces. Length, 18 mill.

European Atlantic.

Described as an Italian pliocene fossil.

S. FUNICULATA, Watson. Pl. 18, fig. 79.

Whorls 8–9, darkish colored, with fine close spiral striae, with 10–12 narrow, low, strong ribs and much wider interspaces.

Length, 6 mill.

Off Pernambuco, Brazil.

S. ACUS, Watson. Pl. 16, fig. 92; Pl. 18, fig. 80.

Solid, white, faintly spirally striate; whorls 12, flatly convex, constricted at the suture, ribs 15–17, strong, rounded, with somewhat narrower interspaces. Length, 5·5 mill.

N. Atlantic, 49–1254 fms; *W. of Azores*, 1000 fms; *off Culebra, W. Ind.* 390 fms.

S. TORTILIS, Watson. Pl. 18, fig. 76.

Whorls about 10, well rounded, slowly enlarging, with 9–10 close-set thread-like spiral striae, extending over the 14 remote, distant, longitudinal ribs. Length, 10 mill.

Off Culebra, W. Ind., 390 fms.

S. COARCTATA, Jeffreys. Pl. 15, figs. 80, 86.

Whitish, or brownish white, solid; whorls 7–9, convex, with very slight close spiral striae, and about 20 longitudinal, low, rounded ribs, with equal interstices. Length, 13 mill.

Norway.

S. *obtusicostata* (fig. 80) and *S. varicosa* (fig. 86) of Sars, not Brocchi, are synonyms.

S. Ochotensis, Middendorff. Pl. 15, fig. 87.

Thick, white, subdiaphanous; whorls numerous, flatly convex, with irregular spiral impressed striae, and very irregular thick slightly oblique, low ribs. Length, 60 mill.

So. Coast of the Sea of Ochotsk.

One of the giants of the genus.

S. borealis, Gould. Pl. 16 fig. 89.

Solid, whitish, smooth, with seven or eight stout ribs and much wider interspaces, whorls about 8. Length, 1·5 in.

Vancouver's Isl. northward.

On account of *S. borealis*, Beck, an unacknowledged species, the name was changed independently in the year 1876 by Canefri to *S. Gouldii*, and by Mörch to *S. Wroblewskyi*.

S. australis, Lam. Pl. 16, fig. 90.

Thick, whitish, whorls about 10, slightly convex, smooth, with 9 or 10 very thick, rounded ribs. Length, 1·5 in.

Australia.

Very closely allied to the preceding species, which has been confounded with it. About the only differences consist in one or two more ribs to each whorl. It remains to be seen whether this difference is constant.

S. Magellanica, Phil. Pl. 15, fig. 88.

Shell white, solid, subventricose; whorls 8, distinct, with rather thick, numerous ribs, bent in a roundish angle near the suture.

Length, 1 in.

Straits of Magellan.

S. Grœnlandica, Chemn. Pl. 16, fig. 91.

Whorls 10–11, convex, thick, distantly spirally grooved, contiguous, with stout, recurved or sub-decumbent ribs. Length, 1·5 in.

Greenland to Massachusetts.

S. subulata, Couthouy is a synonym; as is also *S. planicosta*, Kiener.

S. Loveni, A. Adams. Pl. 16, fig. 94.

Whorls 8, somewhat convex, spirally sulcate, ribs flattened, bluntly aculeate above. Length, 15 mill.

Arctic Sea.

Perhaps a small variety of the preceding species, from which it differs in the produced terminations of the ribs.

S. UNCINATICOSTA, d'Orb. Pl. 16, fig. 95.

Whorls about 6, whitish or yellowish, with distinct, regular spiral liræ, with 12 strong, thick equal lamellæ, aculeate above.

Length, 7 mill.

West Indies.

S. CANDEANA, d'Orb. Pl. 16, fig. 96.

Whitish, shining, whorls 6, rapidly enlarging, convex, with close spiral liræ, and 12–16 simple ribs. Length, 6–9 mill.

West Indies.

S. acuta, Pfr, is a synonym.

S. CRENATA, Linn. Pl. 16, figs, 15, 97, 98.

Thick, white, closely spirally striated, with about 12 rather close, low spiral ribs, usually becoming obsolete on the middle of the last whorl and produced above into sutural crenulations.

Length, 15–17 mill.

Southern Europe; *Canary Is*; *W. Indies.*

It is *S. raricostata*, Costa.

Var. S. CRENULATA, Kiener. Fig. 97.

The West Indian specimens are wider than those of the Mediterranean and Mörch considered them a distinct species, they are so close, however, in other respects, and particularly in the peculiar appressed sutural crenulations of the ribs, that I hesitate to give them a separate position.

Var HOTESSIERIANA, d'Orb. fig. 98.

A very narrow form, differing considerably from the usual West Indian type, as above, being as much narrower than *S. crenata* as the former is wider. Length, 11·5 mill.

West Indies.

S. crassicosta, Gray Ms. and of C. B. Adams are both referred here by Mörch; the former, which is figured by Sowerby from a specimen without locality in the British museum (fig. 15) appears more like the typical *S. crenata*. On account of the fossil *S. crassicostata* Desh. Nyst changed Gray's name to *S. grossicostata*. Mörch adds *S. conifera*, Mtg.

Var. CRENATOIDES, Carp. Pl. 16, fig. 1.

Stout, like Var. *crenulata*, but shorter. Length, 13 mill.

Cape St. Lucas, S. Diego, Cal.

Carpenter writes "additional specimens may connect this with the Portuguese *S. crenata*," and again, in describing the pleistocene fossil ? Var. *insculpta*, "it is quite possible that the three forms had a common origin."

S. DIADEMA, Sowb. Pl. 16, figs. 99, 100.

Solid, short, ventricose, shouldered, smooth, pale fulvous or greyish, with thick longitudinal ribs, nodose at the shoulder-angle, sometimes obsolete on the middle of the last whorl. Length, 18 mill.

Gallapagos Is.

S. ZELEBORI, Frauenfeld. Pl. 15, fig. 75.

Whorls 9, very convex, strongly spirally costate, with rather broad, somewhat recurved lamellæ, white, somewhat solid.

Length, 22 mill.

New Zealand, Australia.

S. VULPINA, Hinds. Pl. 15, fig. 81.

Orange brown, thick, spirally striated; whorls 10, well rounded, with strong, rib-like lamellæ. Length, 6 mill.

Straits of Malacca.

Section AMÆA, H. & A. Adams. 1853.

S. MAGNIFICA, Sowb. Pl. 16, fig. 16.

Whorls 10, well-rounded, thin, with spiral riblets and somewhat wider interstitial spaces showing growth-striæ, on the last whorls occasional longitudinal, narrow ribs, white or brownish white.

Length, 4·25 in.

? *China.*

It is *S. principalis*, Chemn. not Pallas.

S. MARTINII, Wood. Pl. 16, fig. 5.

Thin, white; whorls 7–8, convex, very minutely, closely, spirally striated, with occasional or numerous, irregular, varix-like ribs.

Length, 1 in.

Philippines, Mauritius.

Reeve's locality, West Indies, is erroneous. *S. striata*, Kiener, is a synonym.

S. RARICOSTATA, Lam. Pl. 16, figs. 2, 3.

White, rather thick, fimbriately cancellated (when fresh) by close fine lamellæ and spiral striæ, with occasional stout variceal ribs; whorls about 6, rapidly enlarging and very convex.

Length, 1 inch.

Ceylon, Mauritius.

It is *S. reticulata*, Helbling.

S. SUTURALIS, Hinds. Pl. 16, fig. 8.

Narrow, whitish, stained with brown, minutely spirally striated; whorls 9-10, convex, contiguous, rather compressed, keeled and grooved at the suture, with very infrequent rounded varices.

Length, 9 mill.

Malacca.

S. GENICULATA, Brocchi. Pl. 16, fig. 17.

Reddish brown, whorls 8, well rounded, with fine, close, longitudinal lamellæ and occasional thick varices. Length, 1 in.

Atlantic and Mediterranean Europe.

First described as a pliocene fossil. Recent specimens are occasionally dredged at considerable depths.

S. TURRICULA, Sowb. Pl. 16, figs. 13, 4, 6.

Covered perforate, rather thin, turreted, white, often with two faint chestnut bands, with very close fine spiral liræ; whorls 8–9, with 12–13 lamellæ, some of which are varicose. Length, 18 mill.

West Indies.

S. turrita, Nyst is a synonym; *S. nuda*, Sowb. (figs. 4, 6), described without locality, appears to be another.

S. LINEATA, Say. Pl. 16, figs. 14, 9.

Shell thick, shining, porcellanous, with traces of fine lamellæ, with wider interspaces, and occasional varices; whorls 6–7, moderately convex, white or yellowish or brownish white with two narrow chestnut bands, the lower one the most conspicuous.

Length, 12–15 mill.

Southern Atlantic Coast of the United States.

Reeve's figure represents a specimen in which the lamellæ are unusually developed, whilst the normal denuded state is described as a new species, *S. unicostata*, Sowerby (fig. 9), and changed by Canefri to *S. Fischeriana* on account of *S. uncinaticosta*, d'Orb, mistaken by him for *unicostata*.

S. ERRONEA, Canefri. Pl. 16, fig. 7.

Attenuated, smooth, whitish, with fulvous apex, whorls 8, convex, with rare varices. Length, 18 mill.

? *Port Jackson, Australia.*

Wrongly figured by Sowerby for *S. Mörchi*, Angas, which is a very different species.

Section ACIRSA, Mörch, 1857.

S. GRANULOSA, Quoy. Pl. 16, fig. 11.

Rather thick, fulvous, with a white band, or whitish, very minutely nodose, with vestiges of ribs, gathered and crenulated at the suture; whorls about 9, a little sloping. Length, 1–1·25 in.

Swan River, Australia.

Very closely allied to *S. costulata*, Mighels and Adams, and may be a variety; it has about the same nearness to that species that *S. Australe* has to *S. borealis*.

S. COSTULATA, Mighels and Adams. Pl. 16, figs. 10, 12, 18.

Whitish or greyish fulvous, thick; whorls 8, slopingly, slightly convex, with a spiral rib below, upper portion more or less distinctly longitudinally ribbed, gradually fading until the body whorl is smooth or nearly so. Length, 18–22 mill.

Greenland to Cape Cod, Mass.

Mighels describes a young specimen, in which the ribs are more apparent. The synonymy includes *S. borealis*, Beck, 1839, probably (not described), *S. Eschrichti* (Holb.), Möller (fig. 12), *Turritella Hibernica*, Waller, and *S. undulata*, Sowb. (fig. 18).

S. SUBDECUSSATA, Cantraine. Pl. 16, fig. 19.

Whorls about 11, rather flattened, the upper ones with longitudinal ribs, which soon become obsolete, distantly, lightly, spirally striated, a slight spiral rib on the base of the body whorl. Length, 23 mill.

Mediterranean.

Like *S. costulata*, but narrower. The synonyms are *S. Philippii*, Aradas, and probably *S. striata*, A. Ad., said to come from the Philippines.

S. GRACILIS, Verrill. Pl. 16, fig. 20.

Whorls about 6, well rounded, with deep sutures, and rather prominent, close, rounded ribs, fading out on the middle of the body whorl. Length, 5 mill.

Martha's Vineyard.

Probably not adult.

S. PYRRHIAS, Watson. Pl. 18, fig. 75.

Shell thin, slopingly shouldered, white; whorls about 8, rapidly enlarging, with several distant spiral threads just below the shoulder-angle, and about 11, oblique, procumbent lamellæ. Length, 5 mill.

Off Culebra Isl., West Indies, 390 fms.

Section CIRSOTREMA, Mörch, 1852.

S. KIENERI, Canefri. Pl. 17, figs. 21, 22, 26.

Whorls about 15, well rounded, with a narrow shoulder above, aculeately decussated by spiral ridges crossing thin longitudinal lamellæ. Length, 2·75 in.

Mauritius, New Caledonia.

S. cancellata, Humphreys, is a synonym. For the figure given by Kiener for this species (fig. 26) Canefri has substituted the name *S. Kieneri*, as he believes it to be different not only from Lamarck's species (a Grignon fossil), but also from Sowerby's figure. To the latter I cannot agree, for making due allowance for a worn specimen, and the general unnaturalness resulting from the method of drawing Kiener's figures, they appear like enough.

S. VARICOSA, Lam. Pl. 17, figs. 23, 27.

White, thick, cancellated by spiral and longitudinal lamellæ, the longitudinal sculpture more prominent, fimbriated, with occasional strong tuberculated varices and a spiral basal rib; whorls 12, with very slight shoulder and deep suture. Length, 2 in.

Philippines, Australia, Mauritius.

S. attenuata, Helbling and *S. fimbriata*, Lam. are synonyms.

Var. ABBREVIATA, Sowb. Fig. 27.

Shorter and thicker, the lamellæ aculeate at the top of the whorls, the margin crenated. Length, 1 in.

Mauritius.

S. COCHLEA, Sowb. Pl. 17, figs. 24, 25.

White, spirally striate, fimbriating the numerous rather thin, sharp longitudinal lamellæ, with occasional thick tubercular lamellæ; whorls 8, with flattened shoulder and deep suture, basal rib fimbriated. Length, 1·5 inch.

Mediterranean Sea, Madeira, W. Coast of Africa, West Indies.

Distinguished from the preceding species by its flattened shoulder and general corkscrew-like appearance. The name of *varicosa* has been applied to this species but the figure in the Encyc. Meth. cited by Lamarck, although very poor, could never be mistaken for *cochlea*. Brocchi, in 1814, described an Italian fossil under the name of *S. pumicea* (fig. 25) which has been identified by several good naturalists with the present species; if this identification be correct, Brocchi's name should have precedence, but I am not sat-

isfied of this. Another name for the fossil species is probably *S. serrata*, Calcara.

S. MULTIPERFORATA, Sowb. Pl. 17, fig. 33.

Fulvous, with broad, decumbent, undulated ribs, angularly fluted on one side, the interstices pitted; whorls 8, compressed, channeled at the suture, crowned with raised points, last whorl keeled below, pitted at the keel, varices few, irregular, thick, raised and produced at the suture. Length, 15–18 mill.

Mauritius, Singapore.

S. MORCHI, Angas. Pl. 16, fig. 7.

Solid, whitish; whorls 9, rounded, decussated with longitudinal ribs and more numerous spiral ridges, the longitudinal ones evanescent at the base, suture impressed. Length, 10 mill.

Port Jackson, Australia.

S. CRASSILABRUM, Sowb. Pl. 17, fig. 32.

Whitish or yellowish white; whorls 7, subbiangular, shouldered with deep suture, rather obsoletely ribbed, aperture with thick, expanded, minutely striated margin. Length, 6 mill.

Philippines; Central America; Mazatlan.

I know nothing about this species or its localities.

S. BICARINATA, Sowb. Pl. 17, fig. 28.

Subcylindrical, whitish, narrow, very minutely cancellated, with two spiral ribs on the body whorl, suture pitted. Length, 18 mill.

Philippines.

Perhaps a variation of the last species.

S. ATTENUATA, Pease. Pl. 17, fig. 29.

Narrower and more tapering than the preceding species, with the keels on the last whorl nodose and much less distinct.
Length, 11 mill.

Sandwich Islands.

Very probably a mutation of the preceding form.

S. LEEANA, Verrill. Pl. 17, fig. 31.

Whitish, with well rounded ribs and deep suture, the ribs and interspaces both crossed by numerous fine, spiral striæ, each whorl with a strong varix. Length, 5·5 mill.

Off Martha's Vineyard, 146 *fms.*

S. DENTISCALPIUM, Watson. Pl. 18, fig. 77.

White, with 10 convex whorls and moderate suture, with very numerous, oblique, minute riblets, and finer and more numerous

spiral striæ, mouth encircled with a strong varix. Length, 4 mill.

Torres Sts., N. Australia.

Section ACRILLA, H. Adams, 1860.

S. ACUMINATA, Sowb. Pl. 17, figs. 30, 35.

Narrow, with 15 somewhat convex whorls, pale fulvous, with two chestnut bands, and very numerous, close longitudinal, curved striæ, base keeled. Length, 1·5–1·75 in.

Malacca, Japan.

S. FUSCA, Sowb. Pl. 17, fig. 37.

Narrow, with 9 somewhat convex whorls, yellowish brown with longitudinal chestnut flames, spirally very finely striated. Length, 22 mill.

Sierra Leone.

S. MINOR, Sowb. Pl. 17, fig. 38.

Whorls 8, well rounded, a little angular above, yellowish brown, with two spiral chestnut bands, obliquely, longitudinally sinuously ridged, with a single spiral ridge at the lower part of the body whorl, and chestnut colored below it. Length, 18 mill.

Mouth of the Indus.

Described by A. Adams under the preoccupied name of *gracilis*. Its nearest ally is *S. acuminata*.

S. PRÆLONGA, Jeffreys. Pl. 17, fig. 36.

Whorls 12–15, convex, gradually enlarging, with numerous subdistant, oblique, curved, riblets, and about 5 spiral striæ, whorls angulated in the middle, base with a spiral keel, and smooth below it. Length, 17·5 mill.

N. Atlantic.

Unfigured Species.

S. FORMOSA (for S. pulcherrima, Mts., not Sowb.), S. HISPIDULA and S. STRIATISSIMA, Monts. *Mediterranean.*

S. RUPICOLA, Kurtz. *N. Carolina.*

S. LEPTALEA, Bush. *N. Carolina.*

S. SUBVARICOSA (Dkr. Ms.), S. SCÆVE, S. FILARIS, S. ÆOSPILA, S. PRETIOSULA, S. TURRITELLULA, and var. RIISEI, S. OCTOCOSTATA, S. QUINDECEMCOSTATA, S. MICROMPHALA, S. ERECTISPINA, S. VOLUBILIS, S. SPINÆ-ROSÆ, S. SPURIA (*S. pseudo-scalata*, Chemn.), S. NOVEMCOSTATA, all of Mörch. *West Indies.*

S. CRISPA, Lam. Kiener. Fossil.

S. BÖTTGERI, S. TROCHIFORMIS, S. SENEGALENSIS, Maltzan. *Senegal.*

S. KOBELTI, Jickeli. *Red Sea.*

S. SPIRALIS, S. LILIPUTANA, S. PRÆCLARA, S. FIMBRIATA, S. ELEGANTULA, S. TRABECULATA, S. SOLUTA, S. (OPALIA) EXQUISITA, S. (CIRSOTREMA) CRIBARIUM, (S. CIRSOTREMA) TURBONILLA, all of A. Adams. *Japan.*

S. TENELLA (*S. lineolata*, Htn., not Kiener, and *S. lyra*, Htn., not Sowb.) Hutton. *New Zealand.*

S. CANCELLATA, Woods. *Tasmania.*

S. FUCATA, S. MILLECOSTATA, S. UMBILICATA, Pease. *Sandwich Is.*

S. REFLEXA, S. CREBRICOSTATA, S. BELLASTRIATA, S. SUBCORONATA, S. HINDSII, S. (OPALIA) RETIPOROSA, S. (OPALIA), SPONGIOSA, S. (ACIRSA), MENESTHOIDES, all of Carpenter. *W. Coast of N. America.*

S. CROSSEANA (*S. bullata*, Carp., not Sowb.) and S. CARPENTERI (*S. raricostata*, Carp., not Lam.) Tapparone Canefri. *W. Coast of N. America.*

Subgenus CONSTANTIA, H. Adams, 1860.

S. JUCUNDA, Canefri. Pl. 17, fig. 41.

Thin, pale brown, rimate, whorls 6, slightly convex, the three first smooth, the others decussated by slight close longitudinal plications and spiral striæ. Length, 4 mill.

Straits of Corea.

Described by A. Adams under the name of *Constantia elegans*, which being preoccupied in Scalaria, was changed by Nyst to *Japonica* (also preoccupied) and subsequently by Canefri as above.

S. TANTILLA, A. Ad. (unfigured). *Japan.*

Subgenus CROSSEIA, A. Adams, 1865.

S. MIRANDA, A. Ad. Pl. 17, fig. 48.

White, whorls 3–4, rapidly increasing, very convex, spirally striate, and with 3–4 thin, low, longitudinal varices, aperture produced below. Length, 4 mill.

Is. Gotto, Japan, 71 fathoms.

S. BELLULA, A. Adams. Pl. 17. fig. 46.

More globose than the preceding species, regularly spirally striated with trellised interstices, umbilicus covered by a callus, columella projecting at the base. Length, 1·5 mill.

Is. Gotto, Japan, 64 fms.

Very probably an embryonic shell, and its pertinence to this group is somewhat doubtful.

S. CONCINNA, Angas. Pl. 17, fig. 45.

Narrowly umbilicated, rather solid, white, semipellucid, suture distinct, whorls 5, rounded, first three transversely ribbed and longitudinally striated, remainder transversely punctate-striate; umbilicus bordered by a rounded callus; aperture with a channeled angular projection in front. Diam. 4 mill.

Port Jackson, Australia.

This species, like the last, appears to be a young shell, and a doubtful member of the group.

S. STRIATA, Watson. Pl. 18, fig. 68.

White, spirally striated, with a small, strongly bordered umbilicus; whorls 4, well rounded, a litle tabulated below the suture, last whorl tumid. Length, 1·5 mill.

Near Cape York, N. Australia.

Differs in form and striæ from the preceding species.

S. CANCELLATA, (*Delphinula Johnstoni*, Beddome), and S. LABIATA, Tenison Woods. Unfigured. *Tasmania.*

Genus SCALIOLA, A. Ad., 1860.

S. BELLA, A. Ad. Pl. 17, fig. 39.

Umbilicated, thin, white; whorls 9, convex, covered with agglutinated grains of sand, suture channeled. Length, 4 mill.

Japan.

S. CALEDONICA, Crosse. Pl. 17, fig. 42.

Umbilicus scarcely rimate, whitish, with agglutinated grains of sand; whorls 9, convex. Length, 3·25 mill.

New Caledonia.

Differs in form from the preceding species.

S. ARENOSA, A. Ad. Pl. 17, fig. 47.

Scarcely rimate, turriculated, with narrow shoulder, white; whorls 7, convex, suture deep. Length, 2·75 mill.

N. Australia; Honolulu, Sandwich Is.

Unfigured Species.

S. GLAREOSA and S. GRACILIS, A. Ad. *Japan.*

S. ELATA, Semper Ms. *Red Sea.*

Genus EGLISIA, Gray, 1840.

E. SPIRATA, Sowb. Pl. 18, fig. 58.

Pyramidally turreted; whitish, obliquely stained with fulvous brown; whorls 12, concavely shouldered at the suture, spirally somewhat obtusely ridged. Length, 2 in.

St. Thomas, W. Indies.

It is *E. suturalis*, Gray. A very rare shell.

E. LANCEOLATA, Reeve. Pl. 18, fig. 59.

Light fulvous bay, with 8 rather obscure spiral ridges, the interstices microscopically cancellated; whorls about 18, rounded, with deep suture. Length, 1·5 mill.

Ins. Luzon, Philippines.

E. TRICARINATA, Ads. and Reeve. Pl. 18, figs. 60, 61.

Turreted, of 18 tricarinate whorls, cancellately striate, slightly shouldered, with deep suture, ashy brown. Length, 2·25 in.

China Sea.

Var. CONSPERSA, Ads. and Reeve. Fig. 61.

Longitudinally undulated with chestnut.

E. GRACILIS, Maltzan. Pl. 18, fig. 62.

Turreted, whorls 9, distinct, shouldered, closely spirally striated, violet brown, somewhat tessellated with whitish, aperture chestnut. Length, 15 mill.

Ins. Goree, W. Africa.

A variety is yellowish with sigmoid flames and dots of brown. It is the type of the genus *Smithia* of Maltzan, but appears to differ only from the typical *Eglisia* in being a little more unwound.

Unfigured Species.

E. CUMINGII, A. Ad. *Japan.*

E. PLICATA, Hutton. *New Zealand.*

Genus ACLIS, Lovën, 1846.

Section ACLIS (sensu stricto).

A. ASCARIS, Turton. Pl. 17, fig. 50.

Whorls 8–9, convex, with deep suture, white, solid, semitransparent, rather glossy, with four or five strong spiral ridges, base of

body whorl smooth. Length, 2·5 mill.

N. Europe.

A. SUPRANITIDA, Searles Wood, Pl. 17, figs.49, 56.

Whorls 12, broader, and more rapidly increasing than in the preceding species, distinctly umbilicated, surface varying from smooth and glossy to several spiral ridges, obsolete or distinct, round shouldered. Length, 6·25 mill.

Europe, Madeira.

A. WALLERI, Jeffreys. Pl. 18, fig. 65.

Narrowly umbilicated, whorls 10, rather convex in the middle, sloping above and below, with deep suture, shell very thin, transparent, lustrous, with a few microscopic spiral striæ.
Length, 3·5 mill.

N. Europe, Labrador, N. England.

It is *A. Nisoides*, Brugn.

A. CARINATA, Smith. Pl. 18, fig. 63.

Whorls 9, slightly convex, with narrow spiral sulcations, the periphery subacutely carinated; soiled white. Length, 10 mill.

Whydah, W. Africa.

A. STRIATA, Verrill. Pl. 18, fig. 70.

Whorls 5, well-rounded, with deep suture, whitish, rimate, closely spirally striated. Length, 4 mill.

Near Eastport, Me.; off Newport, R. I.

A. TENUIS, Verrill. Pl. 18, fig. 71.

Very slender, white, glossy, whorls 9, evenly rounded, nearly smooth, with microscopic spiral lines or obscure angles on the lower whorls, suture well impressed, umbilicus rimate. Length, 3·8 mill.

Off Martha's Vineyard, Mass., 100 *fms.*

Section HEMIACLIS, Sars., 1878.

A. VENTROSA, Jeffreys. Pl. 16, fig. 93.

White, whorls 8, well rounded, smooth, rapidly increasing, suture well impressed, narrowly margined. Length, 6 mill.

Lofoten Isl.; Bergen; Mediterranean Sea.

A. inflata, Monts. is a synonym.

A. GLABRA, Sars. Pl. 18, figs. 72, 73.

Shining, vitreous, white, smooth; whorls 9, convex, narrower and not so rapidly increasing as the preceding species. Length, 5·5 mill.

Norway

A. EXIGUA, Sars. Pl. 17, fig. 57.

Whitish, subopaque, glabrous, whorls 8, slightly convex, the last a little dilated at the aperture, umbilicus distinctly rimate. Length, 2 mill.

Arctic Norway.

A. ATTENUANS, Jeffreys. Pl. 17, fig. 40.

Thin, white, smooth, transparent, glossy; whorls 6–7, convex, suture well-defined, but not deep. Length 1·25 mill.

Mediterranean.

The aperture is a little more contracted below than in the last species and the columella more perpendicular; perhaps not adult.

A. SARISSA, Watson. Pl. 17, fig. 54.

Smooth, white, glossy, umbilicus a mere chink; whorls 9; well rounded; with a few slight growth lines. Length, 3·75 mill.

Off Pernambuco, 350 fms.

Broader, with fewer, rounder whorls than in *A. Walleri.*

A. MINUTISSIMA, Watson. Pl. 17, fig. 55.

Smooth, pale brownish hyaline; whorls 7, slightly convex, aperture a little narrowly produced below. Length ·25 mill.

Off Raine Isl., N. E. Australia, 155 fms.

Probably the smallest known gastropod, being the one-hundredth of an inch in length.

Section GRAPHIS, Jeffreys, 1867.

A. UNICA, Montagu. Pl. 18, fig. 66.

Thin, white, semitransparent, somewhat glossy, with numerous flexuous, longitudinal ribs, reticulated by many fine spiral ridges or striæ; whorls 9–10. moderately convex, very slowly increasing, with deep suture. Length, 3 mill.

Europe.

A. GRACILIS, Jeffreys. Pl. 18, fig. 67.

Thick, semitransparent, glossy, yellowish white; whorls 5½, convex, very slowly increasing, a little round shouldered, with about

25 sharp, flexuous, longitudinal ridges, and no spiral sculpture. Length, 2·5 mill.

Mediterranean, Bay of Biscay, W. Africa, Azores.

A. HYALINA, Watson. Pl. 17, fig. 52.

Minutely umbilicated, thin, glossy, white; whorls 12, convex, smooth or with faint indications of ribs, especially on the upper whorls, under a lens the surface appears angulated or malleated with slight decussating striæ. Length, 10 mill.

Off Pernambuco, 350 fms.

A. JEFFREYSII, Tryon. Pl. 18, fig. 69.

Thin, semitransparent, glossy, whitish; whorls 8, very slowly enlarging, with close, longitudinal, thread-like riblets, and very slight microscopic spiral striæ; no umbilicus. Length, 3·75 mill.

Tunis; W. Coast of Africa, 300–1261 fms.

Described by Dr. Jeffreys as *A. striata*, a name preoccupied by Prof. Verrill.

A. MIZON, Watson. Pl. 17, fig. 51.

Thin, lustrous, white; whorls 15–16, convex, with about 40 feeble, unequal, rounded riblets; minutely umbilicated. Length, 15 mill.

Teneriffe.

Section PHERUSA, Jeffreys, 1869.

A. GULSONÆ, Clark. Pl. 17, fig. 43.

Very thin, transparent, lustrous, clear white, without sculpture, spire with a blunt, nearly globular apex, which is decidedly introverted but not sinistral; whorls 6–7, convex, with deep suture; outer lip remarkably flexuous, prominent, expanding, almost notched below; umbilicus closed, but with a chink-like depression. Length, 1·7 mill.

Europe, Madeira.

Section IOLÆA, A. Adams, 1860.

A. SCITULA, A. Ad. Pl. 17, fig. 44.

Rather solid, white; whorls 6, slightly convex, with subdistant spiral grooves, the interstices longitudinally finely striated. Length, 3 mill.

Strait of Corea.

Unfigured Species of Aclis.

A. (Iolæa) amabilis, A. (Iolæa) sculptilis, A. Ad. *Japan.*
A. labiata, A. cingulata, A. sulcata, A. lirata, A. fulgida, A. crystallina, A. Loveniana, A. (Ebala) diaphana, A. (Ebala) scintillans, A. (Ebala) vestalis, A. (Ebala) virginea, all of A. Adams. *Japan.*
A. angulata, Fischer. Figure inaccessible.
A. crenulata, Folin. *Andaman Is.*
A. micra, A. turrita, Petterd. *Tasmania.*
A. hyalina, Hutton. *New Zealand.*
A. tristriata, Tenison-Woods. *Tasmania.*
A. polita (Verrill). =Eulimella, Manual, viii, 342.

Genus STILBE, Jeffreys, 1884.

S. acuta, Jeffreys. Pl. 18, fig. 64.

Umbilicus minutely rimate, thin, semitransparent, milk white smooth; whorls 10, moderately convex. Length, 6·25 mill.

N. Atlantic O.; Long. 54° 33′ W., lat. 55° 36′ N.; 1622 fms.

INDEX AND SYNONYMY.

SCALARIIDÆ, IANTHINIDÆ, TRICHOTROPIDÆ.

PAGE

Abbreviata (Scalaria), Sowb. Conch. Icon., sp. 124, 1874. = S. varicosa, Lam. Var. 81
Achates (Gistel), Mörch. Jour. de Conch., 277, 1860, . . 34
Aciculina (Scalaria), Hinds. Zöol. Proc., p. 125, 1843, . 69
Aciona, Leach. Zool. Misc., ii, 79, 1815 = Scalaria, Lam. 50
Acirsa, Mörch. Prodr. Moll. Grœnl., 1857; H. & A. Adams, Genera, ii, 621, 1858, ... 50, 80
Aclis, Lovën. Ind. Moll. Scand., 16, 1846, . ; . 52, 86
Aclisina, Koninck. Bull. Brux, 1881. = Holopella, M'Coy, 53
Acrilla, H. Adams. Zool. Proc., 241, 1860, . . . 51, 83
Actæonema, Conrad. Am. Jour. Conch., i, 147, 1865, . . 53
Aculeata (Scalaria), Sowb. Zool. Proc., p. 12, 1844, . . 63
Acuminata (Trichotropis), Jeffreys. Malac. and Conch. Mag., No. 2, 36. = T. borealis, Brod. and Sowb. . . . 43
Acuminata (Scalaria), Sowb. Zool. Proc., p, 31, 1844, . . 83
Acus (Scalaria), Watson. Journ. Linn. Soc., xvi, p. 607, 1883, ... 75
Acuta (Scalaria), Pfr. Archiv. fur Naturg., p. 256, 1840. = S. Candeana, d'Orb. 77
Acuta (Stilbe), Jeffr. Zool. Proc., p. 130, t. 10, f. 2, 1884, . 90
Aeospila (Scalaria), Mörch. Journ, Phila. Acad., viii, p. 202, 1875, ... 83
Affinis (Ianthina, Rve. Conch. Icon., sp. 2, 1858. = I. fragilis, Lam. Var. 37
Africana (Ianthina), Rve. Conch. Icon., sp. 8, 1858. = I. fragilis, Lam. 37
Alata (Scalaria), Sowb. Zool. Proc., p. 10, 1844, . . . 55
Alba (Ianthina), Anthon. Verzeichniss, p. 50, 1839, . . 38
Albida (Scalaria), d'Orb. Moll. de Cuba, ii, p. 17, t. 10, f. 24, 25, 1853. = S. eburnea, Pot. and Mich. 71
Albolineata (Scalaria), Sowb. Thes. Conch., t. 33, f. 52, 1847, 68
Algeriana (Scalaria), Weink. Journ. de Conch., p. 247, 1866, 64
Alora, H. Adams. Zool. Proc., 27, 1861, ... 40
Alta (Trichotropis, bicarinata, var.), Dall. Amer. Journ. Conch., vii, p. 120, 1872, ... 42
Amæa, H. and A. Adams. Genera of Rec. Moll., i, 223, 1853, 50, 78
Amabilis (Iolæa), A. Ad. Zöol. Proc., p. 310, 1867, . . 90
Amethistina (Schinz, 1825), Mörch. Jour. de Conch., 282, 1860, ... 34

PAGE.

Andrewsii (Scalaria), Verrill. Conn. Trans., v, p. 526, t. 57, f. 35, 1882, ... 75
Angulata (Scalaria), Say. Amer. Conch., iii, t. 27, 1831, . 70
Angulata (Aclis), Fischer. Berchon's Fonds de la Mer., i, p. 150, t. 23, f. 1, ... 90
Angusta (Scalaria eburnea, var.), Mörch. Journ. Phila. Acad., viii, p. 199, 1875, ... 71
Angusta (Scalaria), Dkr. Moll. Japonica, p. 13, t. 1, f. 11, 1861, ... 65
Annamitica (Recluzia Rollandiana, var.), Wattebled. Journ. de Conch., p. 67, t. 3, f. 4, 1886, ... 38
Aperta (Recluzia), Jeffreys. Ann. Mag. N. Hist., 3d ser., iii, 114. = Torellia vestita, Jeffreys. 39, 46
Arenosa (Scaliola), A. Ad. Ann. and Mag., Dec., 1862, . 85
Ariadna , Fischer. Jour. de Conch., xii, 247, 1864, . . 40
Arctica (Cancellaria), Midd. Beitrage, p. 112, t. 9, f. 11, 12, 15, 1849. = Trichotropis Kroyeri, Phil. 44
Ascaris (Aclis), Turton. Conch. Dict., 217, ... 86
Atlantica (Ianthina nitens, var.), Mörch. Journ. de Conch., p. 280, 1860. = I. globosa, Swains. 37
Atlantica (Trichotropis), (Beck), Möller. Index Moll. Grœnl., p. 85, 1842. = T. borealis, Brod. and Sowb. . 43
Attenuans (Aclis), Jeffreys. Ann. and Mag. Nat. Hist., xi, p. 396, t. 16, f. 3, 1883, ... 88
Attenuata (Scalaria), Pse. Zool. Proc., p. 400, 1860, . . 82
Attenuata (Scalaria), Sowb. (not Pse.). Conch. Icon., sp. 116, 1874. = S. microsoma, Tap.-Canefri. 67
Attenuatus (Turbo), Helbling. Abhand. Privat-Gesell. Böhm., iv, t. 1, f. 10, 1779. = S. varicosa, Lam. . . 81
Aurita (Scalaria), Sowb. Zool. Proc., p. 26, 1844, . . 59
Aurita (Scalaria occidentalis, var.), Mörch. Journ. Phila. Acad., viii, p. 196, 1875, ... 63
Australis (Scalaria), Lam. Anim. sans Vert., vi, 2nd Ed., p. 228, f. 6, ... 76
Austro-Caledonica (Scalaria), Montrouzier. Journ. de Conch., p. 373, 1859, ... 62

Bairdii (Scalaria), Smith. Zool. Proc., p. 734, t. 75, f. 14, 1871, ... 73
Balteata (Ianthina), Rve. Conch. Icon., sp. 11, 1858. = I. planospirata, Ad. and Rve. 36
Bella (Scaliola), A. Ad. Ann. and Mag., vi, p. 120, 1860, . 85
Bellastriata (Scalaria), Cpr. Calif. Proc., iii, p. 221, 1868, . 84
Bellula (Crossea), A. Ad. Ann. and Mag., xv, p. 323, 1865, 85
Bensoni (Recluzia), A. Ad. Ann. and Mag., viii, p. 402, 1861, ... 39
Bicarinata (Scalaria), Sowb. Zool. Proc., p. 30, 1844, . . 82
Bicarinata (Trichotropis), Brod. and Sowb. Zool. Journ., iv, p. 374, t. 11, f. 4-8, ... 42

PAGE.

Bicolor (Ianthina), Less. Voy. Coq., ii, pt. i, p. 365, t. 8, f. 2, 9, n. 1830. ?= I. planospirata, Ad. and Reeve. . . 36
Bicolor (Ianthina), O. Costa. Cat. Syst., p. cvi, No. 27, 1829. = I. Costæ, Mörch. 36
Bicolor (Ianthina), Menke. Synopsis, p. 84, 1828. = I. fragilis, Lam. 36
Bifida (Ianthina), Nuttall. Jay's Cat. of Shells, p. 68. = I. exigua, Lam. 38
Blainvilleana (Separatista), Petit. Jour. de Conch., ii, 22, t. 1, f. 5, 1851, ... 45
Blandii (Scalaria echinati-costa, var.), Mörch. Journ. Phila. Acad., viii, p. 195, t. 29, f. 8, 1875, ... 64
Bœttgeri (Scalaria), Maltz. Nachrichtsb. der Deutsch. Malak., xvii, p. 26, 1885, ... 84
Borealis (Trichotropis), Brod. and Sowb. Zool. Journ., iv, p. 375, ... 42
Borealis (Scalaria), Gld. U. S. Expl. Exped., p. 207, . . 76
Borealis (Scalaria), Beck. Ind., 1839. = S. costulata, Mighels and Adams. 76, 80
Brevis (Scalaria), d'Orb. Voy. Amer. Merid., p. 390, t. 75, f. 22–24, ... 58
Britannica (Ianthina), Leach. MSS. Forbes and Hanley, Brit. Moll., iv, 260. = I. fragilis, Lam. var. . . . 37
Bulbulus (Scalaria), Sowb. Thes. Conch., i, t. 34, f. 85, . 56
Bullata (Scalaria), Sowb. Zool. Proc., p. 27, 1844, . . 55
Bullata (Scalaria), Cpr. Ann. Mag. Nat. Hist., xv, p. 397, 1865. = S. Crosseana, Canefri. 84

Cælatura, Conrad. Am. Journ. Conch., i, 28, 1865. = Actæonema, Conrad. 53
Cæruleata (Ianthina), Rve. Conch. Icon., sp. 7, 1858. = I. planospirata, Ad. and Rve. 36
Caledonica (Scaliola), Crosse. Journ. de Conch., xviii, p. 299, 1870, ... 85
Callonema, Hall. Pal. N. York, v, pt. 2, 1879. = Elasmonema, Fischer. 53
Cancellata (Scalaria), Tenison-Woods. Roy. Soc. Tasmania, p. 122, 1877, ... 84
Cancellata (Crossea), Tenison-Woods. Proc. Roy. Soc. Tasm. 85
Cancellata (Scalaria), Humph. Mus. = S. Kieneri, Canefri. 81
Cancellata (Trichotropis), Hinds. Zool. Proc., p. 17, 1843. . 43
Candeana (Scalaria), d'Orb. Moll. de Cuba, ii, p. 20, t. 11, f. 28, 30, 1853, ... 77
Candida (Scalaria pseudoscalaris, var.), Monts. Jour. de Conch., 37, 1877, ... 74
Candidissima (Scalaria), Monts. Journ. de Conch., p. 37, t. 2, f. 5, 1877, ... 72
Cantrainei (Scalaria), Weink. Journ. de Conch., xiv, p. 246, 1866. = S. muricata, Risso. 72

PAGE.

Capreolata (Ianthina), Montrouzier. Journ. de Conch., t. 2, f. 4, 1860. = I. exigua, Lamarck. 38
Carinata (Aclis), Smith. Zool. Proc., p. 734, t. 75, f. 20, 1871, ... 87
Carinata (Seguenzia), Jeffreys. Proc. Roy. Soc., p. 201, 1876, 47
Carpenteri (Scalaria), Tap. Canefri. Journ. de Conch., p. 154, 1876, ... 84
Carpenteri (Ianthina), Mörch. Journ. de Conch., p. 277, 1860. = I. fragilis, Lam. 36
Casta (Ianthina), Rve. Conch. Icon., sp. 4, 1858. = I. planospirata, Ad. and Rve. 36
Casta (Scalaria), A. Ad. Zool. Proc. Conch. Icon., sp. 86, 1873, ... 67
Catanuanensis (Scalaria), Sowb. Zool. Proc., p. 27, 1844, . 61
Catanuanensis (Scalaria), Sowb. Conch. Icon., fig. 67 (not of text). = S. pulcherrina, Sowb. 68
Cedo-nulli (Trichotropis), A. Ad. Ann. Mag., v, p. 411, 1860, ... 44
Celesti (Scalaria), Aradas. = S. frondosa, Sowb., 1853, . 65
Centiquadra (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 194, t. 29, f. 4, 1875, ... 64
Chemnitzii (Separatista), A. Ad. Zool. Proc., 45, 1850, . 45
Ciliata (Trichotropis), Kuzer. Sowb. Thes. Conch. Plate. = S. Kroyeri, Phila. 44
Cingulata (Aclis), A. Ad. Ann. and Mag., vi, p. 118, 1860, . 90
Cioniscus, Jeffreys. Brit. Conch., v, 210, 1869. = Graphis, Jeffreys. 52
Cirsotrema, Mörch. Yoldi Cat., i, 49, 1852, . . . 50, 81
Clathrata (Trichotropis), A. Ad. MSS. Thes. Conch. plate. 43
Clathratula (Scalaria), Adams. Microscope, t. 14, f. 19, . 73
Clathrus, Oken. Lehrb. Zool., 1815, ... 50, 62
Clathrus (Scalaria), Say (not Linn). Am. Conch., iii, Pl. 27. = S. angulata, Say. 71
Clathrus (Turbo), Authors (not Linn). = Scalaria communis, Lama. 72
Clathrus (Scalaria), Linn. Syst. Nat. Edit., xii, 1237 (not of Edit., x). = S. lamellosa, Lam. 74
Clementina (Scalaria), Grat. Mem. sur les coq., p. 61, 1840. 56
Coarctata (Scalaria), Jeffreys. Zool. Proc., p. 139, 1884, . 75
Cochlea (Scalaria), Sowb. Thes. Conch., t. 35, f. 142, . . 81
Communis (Scalaria), Lam. Anim. sans Vert. Edit. Desh., ix, 75, ... 72
Communis (Ianthina), Costa. Cat., p. 112, 1829. = I. globosa, Swainson. 37
Communis (Ianthina), Lam. Anim. sans Vert. Edit. Desh., ix, p. 4. = I. fragilis, Lam. 36
Commutata (Scalaria), Monts. Ann. Mus. Genova, ix, 420. = S. lamellosa, Lam. 74

PAGE.

Compsopleura, Conrad. Am. Journ. Conch., i, 28, 1865.
= Opalia, H. and A. Ad. 50
Concinna (Crossea), Angas. Zool. Proc., p. 911, t. 44, f. 14, 1867, ... 85
Concinna (Scalaria), Sowb. Zool. Proc., p. 28, 1844, . . 67
Conica (Trichotropis), Möll. Index Moll. Grœnl., p. 82, . 43
Conifera (Scalaria), Mtg. Brit. Shells, p. 314.
= S. Hotesseriana, d'Orb. 77
Connexa (Scalaria), Sowb. Zool. Proc., p. 28, 1844, . . 69
Conspersa (Turritella), Ad. and Reeve. Voy. Samarang, p. 47. =Eglisia tricarinata, Ad. and Rve, var. . . . 86
Consors (Scalaria), Crosse and Fisch. Journ. de Conch, p. 347, 1864, ... 74
Constantia, A. Adams. Ann. Mag. N. Hist., v, 300, 1860, 51, 84
Contorta (Ianthina Carpenteri, var.), Carp. Cat., p. 186.
= I. fragilis, Lam. 36
Coronata (Scalaria), Lam. Anim. sans Vert., vi, 227.
= S. lamellosa, Lam. 74
Coronata (Scalaria), Scacc. Phil. Moll. Sicil., ii, 127, 1844.
= S. Hellenica, Forbes. 73
Coronata (Scalaria), Weink. Journ. de Conch., x, p. 348, 1862. = S. Algeriana, Weink. 64
Coronata (Trichotropis), Gld. Bost. Proc., f. 324, 1860; Krause, Archiv. für Naturg, li, 268, ... 43
Costæ (Ianthina), Mörch. Journ. de Conch., 2d Ser., iv. 274, 1860. = I. fragilis, Lam. 36
Costellata (Trichotropis), Couthouy. Bost. Journ., ii, t. 3, f. 2, 1839. = T. borealis, Brod. and Sowb. 43
Costulata (Turritella), Mighels and Adams. Bost. Journ. Nat. Hist., iv, 50, 1842. = Scalaria. 80
Costulata (Scalaria), Kien. Coq. Viv., p. 5, t. 2, f. 4, . . 57
Crassa (Scalaria), Sowb. Thes. Conch., i, t. 33, f. 55, . . 59
Crassicosta (Rissoa), C. B. Ad. Bost. Proc., p. 6, 1845.
= S. Hotesseriana, d'Orb. 77
Crassicosta (Scalaria), Gray. Brit. Mus. Sowb. Thes., p. 104, f. 119, 1847. = S. Hotesseriana, d'Orb. 77
Crassilabrum (Scalaria), Sowb. Thes. Conch., i, p. 135, t. 35, f. 115, 116, 1847, ... 82
Creberrima (Scalaria), Hinds. Zool. Proc., p. 125, 1843, . 68
Crebricostata (Scalaria), Cpr. Calif. Proc., iii, p. 222, 1868, 84
Crenata (Scalaria), Linn. Syst. Nat. Edit., xii, 1238, . . 77
Crenatoides (Scalaria), Carp. Ann. Mag. N. Hist., 3d Ser., xiv, 47, 1864. = O. crenata, L. Var. 77
Crenulata (Aclis), Folin. Moll. Andaman., p. 5, . . . 90
Crenulata (Scalaria), Kien. Coq. Viv., p. 17, t. 6, f. 20.
= S. crenata, Linn, var. 77
Crenulata (Scalaria), Pse. Amer. Journ. Conch., iii, p. 290, t. 24, f. 13, 1867. 54

PAGE.

Cribrarium (Cirsotrema), A. Ad. Ann. and Mag., viii ,p. 483, 1861, ... 84
Crispa (Scalaria), Lam. Ann. du Mus., viii, t. 37, f. 5, a. b. 84
Crispa (Scalaria), Scacchi. = S. frondosa, Sowb. . . 65
Crispata (Scalaria), Pse. Amer. Journ. of Conch., iii, p. 289, t. 24, f. 12, 1867, ... 61
Crosseana (Scalaria), Tap.-Canefri. Journ. de Conch., p. 154, 1876, ... 84
Crosseia, A. Adams. Ann. Mag. N. Hist., xv, 323, 1865, 51, 84
Crystallina (Aclis), A. Ad. Ann. and Mag. Nat. Hist., p. 43, 1861, ... 90
Cumingii (Eglisia), A. Ad. Zool. Proc., 204, 1850, . . 86
Curvilineata (Scalaria), Sowb. Thes. Conch., i, p. 94, t. 32, f, 59, 1847, ... 70
Cyclora, Hall. Am. Journ. Science, xlviii, 294, 1845. = Holopea, Hall. 35
Cyclostoma, Lam. Prodr. (in part), 1799. = Scalaria, Lam. 50

Dalliana (Scalaria), Verrill and Smith. Amer. Journ. Sci., xx, p. 395, 1880. = S. clathratula, Turton, . . . 73
Decollata (Ianthina), Carp. Cat. Reigen Coll., p. 187. = I. globosa, Swains, ... 37
Decussata (Scalaria), Pse. Amer. Journ. of Conch., iii, p. 289, t. 24, f. 10, 1867, ... 65
Decussata (Scalaria), Sowb. (not Lamarck). Thes. Conch., t. 35, f. 140. = S. Kieneri, Canefri. 81
Decussata (Scalaria), Kien. Coq. Viv., t. 7, f. 25. = S. Kieneri, Canefri. 81
Delicata (Torellia), Phil. Moll. Sicil., ii, p. 222, t. 28, f. 3, 1844, ... 46
Delicatula (Scalaria), Crosse. Journ. de Conch., p. 347, t. 3, f. 9, 10, 1864, ... 69
Delicatula (Seguenzia), Dall. Bull. Mus. Comp. Zool., ix, p. 48, 1882, ... 48
Delicatula (Scalaria), H. Ad. Zool. Proc., p. 274, t. 19, f. 9, 1869. = S. tenera, H. Ad. 62
Densistriata (Trichotropis), Jeffr. Zool. Proc., p. 48, t. 5, f. 8, 8a, 1885, ... 44
Denticulata (Scalaria), Sowb. Thes. Conch., p. 87, t. 32, f. 25, 26, 1847. = S. centiquadra, Mörch. 64
Dentiscalpium (Scalaria), Watson. Journ. Linn Soc., xvi, p. 607, 1883, ... 82
Depressa (Ianthina), Rve. Conch. Icon., sp. 14, 1858. = I. planospirata, Ad. and Rve. 36
Diadema (Scalaria), Sowb. Zool. Proc., p. 55, 1832, . . 78
Dianæ (Scalaria), Hinds. Zool. Proc., p. 125, 1843, . . 74
Diaphana (Ebala), A. Ad. Ann. Mag. N. Hist., vii, 44, 1861, 90
Dolium (Trichotropis), Petit. Journ. de. Conch., ii, p. 21, t. 1, f. 4, 1851. = T. Kroyeri, Phil. 44

PAGE.

d'Orbignyanum (Trichotropis), Petit. Journ. de Conch., p. 261, t. 7, f. 2, 1851. = Coralliophila, Manual ii, 206, . 45
Dubia (Scalaria), Sowb. Zool. Proc., p. 13, 1844, . . 60
Ducalis (Scalaria), Mörch. Mal. Blatt., p. 143, 1875, . . 69

Ebala, Leach. MS. Gray, Zool. Proc., 147, 1847. = Aclis, Lovën. 52
Eburnea (Scalaria), Pot. and Mich., Cat. Douai, p. 344, t. 31, f. 1–2, 1838; Mörch. Journ. A. N. S., viii, p. 199, t. 29, f. 10, 71
Echinati-costa (Scalaria), d'Orb. Moll. de Cuba, ii, p. 18, t. 11, f. 46, 1853, ... 64
Eglisia, Gray. Synops. Brit. Mus., 1840, . . . 51, 86
Elasmonema, Fischer. Man. de Conch., 778, 1885, . . 53
Elata (Scaliola), Semper, in Sched. Issel, Mar Rosso, 198, . 86
Elegans (Seguenzia), Jeffreys. Proc. Roy. Soc., p. 200, 1876, 47
Elegans (Scalaria), d'Orb. Voy. Amer. Merid., p. 389, t. 54, f. 1–2. = S. Orbignyi, Nyst. 70
Elegans (Constantia), A. Ad. Ann. and Mag. Nat. Hist., v, 300, 1860. = Scalaria jucunda, Tap.-Canefri. . . . 84
Elegantula (Scalaria), A. Ad. Ann. and Mag., viii, p. 481, 1861, 84
Elenensis (Scalaria), Sowb. Zool. Proc., p. 29, 1844, . . 70
Ellipsoidea (Trichotropis), Gould. Bost. Proc., 324, 1860, . 45
Elongata (Ianthina), Maravig. Aradas and Benoit, 148. = I. globosa, Swains, ... 37
Erectispina (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 196, 1875, ... 83
Eritima (Seguenzia), Verrill. Trans. Conn. Acad., vi, 189, . 47
Erronea (Scalaria), Canefri. Journ. de Conch., p. 155, 1876, 79
Erythræa (Recluzia), Jickeli. Jahrb. Malak. Gesell., ix, 367, 1882, ... 39
Eschrichti (Scalaria), Möller. Kroyer's Tidsskr, iv, p. 83, 1842. = S. costulata, Migh. 80
Exigua (Ianthina), Lam. Anim. sans Vert., vi, p. 206, . 37
Exigua (Aclis), G. O. Sars. Moll. Arct. Norv., p. 196, t. 22, f. 8, 1878, ... 88
Eximia (Scalaria), Ad. and Rve. Voy. Samarang, p. 51, t. 11, f. 16, 1850, ... 63
Eximia (Scalaria), Pecchioli. = S. frondosa, Sowb. . . 65
Exquisita (Opalia), A. Ad. Ann. and Mag., xiii, p. 310, 1864, ... 84

Fasciata (Scalaria), Sowb. Zool. Proc., p. 11, 1844, . . 55
Fibula (Ianthina), Rve. Conch. Icon., sp. 17, 1858. = I. fragilis, Lam. Var. 37
Filaris (Scalaria), Mörch. Jour. Philad. Acad., viii, 203, 1876, 83
Fimbriata (Torellia), Verrill and Smith. Conn. Trans., v, p. 520, t. 57, f. 27, 27a, 1882, ... 46
Fimbriata (Scalaria), Lam. E. M., t. 451, f. 4a, b. = S. varicosa, Lam. 81

PAGE.

Fimbriata (Scalaria), A. Ad. Ann. and Mag., viii, p. 480, 1861, ... 84
Fimbriata (Trichotropis), Jeffr. Zool. Proc., p. 48, t. v, f. 7, 7a, 1885, ... 44
Fischeriana (Scalaria), Tap.-Canefri. Journ. de Conch., p. 152, 1876. = S. lineata, Say. 79
Flavida (Trichotropis), Hinds. Voy. Sulph., t. 11, f. 11, 12, 1844. = T. cancellata, Brod. and Sowb. 43
Foliacei-costa (Scalaria), d'Orb. Moll. de Cuba, ii, p. 17, t. 11, f. 26–28, 1853, ... 63
Formosa (Sequenzia), Jeffreys. Proc. Roy. Soc., p. 200, 1876. (Wood cuts.) = S. monocingulata, Seguenza. . . . 46
Formosa (Scalaria), Monts. Poche Note, p. 12, ... 83
Formosissima (Scalaria), Jeffreys. Zool. Proc., p. 140, t. 10, f. 10, 1884, ... 62
Fragilis (Ianthina), Lesson. Voy. Coq., p. 363, t. 8, f. 1. ? = I. planospirata. Ad. and Rve. 36
Fragilis (Ianthina), Lam. Syst. Anim. sans Vert., p. 89, 1801, 36
Fragilis (Scalaria), Hanley. Book of Species. = S. eburnea, Pot. and Mich. 71
Friabilis (Scalaria), Sowb. Zool. Proc., p. 27, 1844, . . 61
Frondosa (Scalaria), Sowb. Min. Conch., vi, p. 149, t. 577, f. 1, 1829, ... 65
Fucata (Scalaria), Pse. Zool. Proc., p. 400, 1860, . . 84
Fulgida (Aclis), A. Ad. Ann. and Mag. Nat. Hist., p. 43, 1861, ... 90
Funiculata (Scalaria), Watson. Jour. Linn. Soc., xvi, 609, 1883, ... 75
Funis, Seeley. Ann. Mag. N. Hist., 3d Ser., vii, 285, 1861, . 51
Fusca (Scalaria), Sowb. Zool. Proc., p. 30, 1844, . . . 83

Geniculata (Scalaria), Brocchi. Conch. Foss. Subap., ii, p. 659, t. 16, f. 1, ... 79
Georgettina (Scalaria), Kien. Coq. Viv., p. 14, t. 5, f. 15, . 73
Glabrata (Scalaria), Hinds. Zool. Proc., p. 124, 1843, . . 59
Glabra (Hemiaclis), Sars. Moll. Norv., 198, 1878, . . 88
Glareosa (Scaliola), A. Ad. Ann. and Mag., Dec., 1862, . 86
Globosa (Ianthina), Swainson. Zool. Illustr., 1st Sec., ii, t. 85, 1822, ... 37
Globosa (Recluzia), E. A. Smith. Journ. Linn. Soc., xii, p. 551, t. 30, f. 8, 1876, ... 39
Gouldi (Scalaria), Canefri. Journ. de Conch., p. 154, 1876. = S. borealis, Gould. 76
Gouldii (Trichotropis), A. Ad. Zool. Proc., 369, 1856; Ibid, 272, 1861, ... 45
Gracilenta (Trichotropis), Braz. Linn. Soc. N. S. W., i, p. 313, 1876, ... 45
Gracilenta (Scalaria), Gld. Bost. Proc., ii, p. 252, 1847. . 66
Gracilis (Scalaria), Sowb. Zool. Proc., p. 12, 1844, . . 67

PAGE.

Gracilis (Acirsa), Verrill. Proc. U. S. Nat. Mus., iii, p. 377, 1880, ... 80
Gracilis (Acrilla), H. Ad. Zöol. Proc., p. 241, 1860. = S. minor, Sowb. 83
Gracilis (Scaliola), A. Ad. Ann. and Mag., Dec., 1862, . 83
Gracilis (Smithia), von Maltzan. Nachrichts. der Deutsch. Gesell., p. 98, July, 1883, ... 86
Gracilis (Cioniscus), Jeffr. Zool. Proc., p. 341, 1884, . . 88
Gradata (Scalaria), Hinds. Sowb. Thes. Conch., i, t. 34, f. 109, ... 62
Gradatella (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 198, t. 29, f. 11, 1875, ... 71
Grandis (Ianthina), Browne. Jam., p. 399, t. 32, f. 2. = I. fragilis, Lam. 36
Grandis (Ianthina), Rve. Conch. Icon., sp. 3, 1858; Thes. f. 16, 18. = I. Britannica, Leach, var. 37
Granulosa (Scalaria), Quoy. Zool. Voy. Astrolabe. . . 80
Graphis, Jeffreys. Brit. Conch., iv, 102, 1867, . . 52, 88
Gravitellensis (Scalaria), Seguenza. = S. frondosa, Sowb. . 65
Grayi (Separatista), A. Ad. Zool. Proc., 45, 1850, . . 45
Groenlandica (Scalaria), Chemnitz. xi, p. 155, f. 1878–1879, 76
Grossicostata (Scalaria), Nyst. Tableaux, p. 36, 1873. = S. Hotesseriana, d'Orb. 77
Gulsonae (Chemnitzia), Clark. Ann. and Mag. Nat. Hist., 3d Ser., vi, p. 459, ... 89
Gyrotropis, Gabb. Proc. Philad. Acad., 300, t. 17, f. 6, 1876, 41

Hargravesii (Recluzia), Cox. Zool. Proc., p. 172, t. 16, f. 8, 1870, ... 38
Hellenica (Scalaria), Forbes. Rep. Æg. Invert., 189, 1844; Jeffreys, Zool. Proc., 140, 1884, ... 73
Hemiaclis, Sars. Moll. Arct. Norv., 197, 1878, . . . 52
Hexagona (Scalaria), Sowb. Zool. Proc., p. 29, 1844, . . 70
Hibernica (Turritella), Waller. Jeffreys, Ann. Mag., xix, 241, 1877. = S. costulata, Mighels. 80
Hindsii (Scalaria), Carpenter. Zool. Proc., 165, 1856, . . 84
Hispidula (Scalaria), Monts. Notiz. Conch. Medit., p. 59,; Jour. de Conch., 264, 1874, ... 83
Holopea, Hall. Pal. N. Y., i, 1847, ... 35
Holopella, M'Coy. Ann. Mag. N. Hist., vii, 47, 1852, . . 53
Hotessieriana (Scalaria), d'Orb, Moll. de Cuba, ii, p. 16, t. 10, f. 22, 23, 1853. = S. crenata, Linn., var. 77
Humphreysiana (Scalaria), Kien. Coq. Viv., p. 15, t. 5, f. 16. = S. angulata, Say. 70
Hyalina (Scalaria), Sowb. Zool. Proc., p. 11, 1844, . . 57
Hyalina (Aclis), Hutton. New Zeal. Journ. of Sci., ii, p. 173, 1884, ... 90
Hyalina (Aclis), Watson. Journ. Proc. Linn. Soc., xv, p. 246, 1881, ... 89

PAGE.
Ianthina, Lam. Prodr., 75, 1799, ... 33, 36
Ianthina (Helix), Linn. Syst. Nat. Ed., x, p. 772, 1758.
= Ianthina fragilis, Lam. 36
Ianthina (Helix), Forskal., p. 26, No. 75.
= Ianthina Costæ, Mörch. 36
Ianthoscala, Mörch. Jour. Philad. Acad., viii, 203, 1876, . 50
Immaculata (Scalaria), Sowb. Zool. Proc., p. 26, 1844, . 61
Imperialis (Scalaria), Sowb. Zool. Proc., p. 13, 1844, . . 55
Incisa (Ianthina), Phil. Zeitsch für Malak., p. 149, 1848.
= I. exigua, Lam. 38
Inclyta (Scalaria), Melvill. Jour. of Conch., iv, 316, 1885.
= S. neglecta, Ad. and Reeve. 55
Inconspicua (Scalaria), Sowb. Thes. Conch., i, p. 90, t. 33, f. 53, 1847, ... 58
Indianorum (Scalaria), Cpr. Ann. Mag. N. Hist., 3 ser., xiv, 28, 1865, ... 70
Indistincta (Scalaria), Sowb. Zool. Proc., p. 27, 1844, . . 61
Inermis (Trichotropis), Hinds. Zool. Proc., p. 18, 1843.
= T. borealis, Brod. and Sowb. 43
Inflata (Trichotropis), Friele. Nordmeer. Exped., p. 275. 1879, ... 45
Inflata (Scalaria inconspicua, var.), Mörch. Journ. Phila. Acad., viii, p. 203, 1875, ... 58
Inflata (Hemiaclis), Monts. Bull. Mal. Soc. Ital., vi, p. 69, 1880, ... 87
Inornata (Trichotropis), Hutton. Cat. Mar. Moll. N. Z., p. 26, 1873. = T. clathrata, Sowb. 43
Insignis (Trichotropis), Midd. Malac. Ross., p. 107, t. 10, f. 7–9, ... 43, 45
Involuta (Ianthina), Rve. Conch. Icon., sp. 12, 1858.
= I. fragilis, Lam. Var. 37
Iodes (Leach), Gray. Ann. Mag. N. Hist., xx, 1847, . . 34
Iodina, Mörch. Jour. de Conch., 282, 1860, ... 34
Iolæa, A. Adams. Ann. Mag., v, 300, 1860; Zool. Proc., 310, 1867, ... 53, 89
Ionica (Seguenzia), Watson. Zool. Proc., p. 589, 1876, . 47
Iphinoë, H. & A. Adams. Gen. Rec. Moll., i, 280, 1854, . 40
Iricolor (Ianthina), Reeve. Conch. Icon., sp. 23, 1858.
= I. globosa, Swains. 37
Irregularis (Scalaria), Sowb. Zool. Proc., p. 13, 1844, . . 60
Japonica (Scalaria), Reeve (not Nyst.). Conch. Icon., sp. 122.. = S. Japonica, Dunker. 65
Japonica (Scalaria), Dkr. Moll. Japon., p. 13, t. 1, f. 13, 1861, 65
Japonica (Scalaria), Nyst. Tab. Syn., 1871.
= S. jucunda, Canefri. 84
Jeffreysii (Aclis), Tryon. 89
Jeffreysii (Scalaria), Tryon. 62
Jehennei (Recluzia), Petit. Journ. de Conch., iv, p. 118, t. 5, f. 3, 1853, ... 39

PAGE.

Johnii (Helix), Chemn. Conch. Cab., xi, p. 284, t. 210, f. 2076–77 ; Jousseaume, Rev. et. Mag. Zool., xxiii, 205, 1872, 38
Johnstoni (Delphinula), Beddome. Roy. Soc. Tasmania, 1881 ; Ibid., 170, 1882. = Crossea cancellata, Tenison-Wood. 85
Jucunda (Scalaria), Canefri. Journ. de Conch., p. 153, 1876, 84
Jukesiana (Scalaria), Forbes. Voy. Rattlesnake, Append. p. 383, t. 3, f. 7, 1852, ... 66

Kieneri (Scalaria), Canefri. Journ. de Conch., p. 155, 1876, 81
Kobelti (Scalaria), Jickeli. Jahrb. Deutsch. Malak., vii, p. 292, 1880, ... 84
Krebsii (Scalaria), Mörch. Journ. Phila. Acad., viii, t. 29, f. 1, 2, 1875, ... 58
Kröyeri (Trichotropis), Phil. Zeit. für Malak., f. 175, 1848, 44
Kusmici (Scalaria), Brus. Journ. de Conch., xvii, p. 346, 1869. = S. Cantrainei, Weink. 72
Kuzeri (Trichotropis), Phil. Reeve, Icon., sp. 4. = T. Kroyeri, Phil. 44

Labiata (Aclis), A. Ad. Ann. and Mag., vi, p. 118, 1860, . 90
Labiata (Crossea), Tenison-Woods. Roy. Soc. Tasmania, p. 151, 1875, ... 85
Lactea (Scalaria), Krauss. Sudaf. Moll., p. 94, t. 5, f. 27, 1848, ... 68
Læta (Ianthina), Monts. Nom. Gen. e Spec., p. 105, 1884. = I. pallida, Harvey. 37
Lævigata (Scalaria), Calcara. = S. communis, Lam. . . 72
Lamellosa, Lam. Anim. sans Vert. 74
Lanceolata (Eglisia), Rve. Conch. Icon., sp., 2, 1849, . . 86
Laskeyi (Fusus), Macgillivr. Moll. Aberd., 170. = Trichotropis borealis, Brod. and Sowb. 43
Latifasciata (Scalaria), Sowb. Reeve, Conch. Icon., sp. 117, 1874, ... 56
Laxa (Seguenzia), Jeffreys. Zool. Proc., p. 44, t. 5, f. 4, 4a, 1885, ... 48
Laxata (Scalaria), Sowb. Zool. Proc., p. 11, 1844, . . 57
Leeana (Scalaria), Verrill. Conn. Trans., v, p. 526, t. 57, f. 34, 1882, ... 82
Leptalea (Scalaria), Bush. Conn. Trans., vi, p. 465, 1885, . 83
Ligata (Scalaria), C. B. Ad. Contrib. Conch., No. 4, p. 67. = T. eburnea, Pot. et Mich. 71
Liliputana (Scalaria), A. Ad. Ann. and Mag., viii, p. 481, 1861, ... 84
Lineata (Seguenzia monocingulata, Var.), Watson. Jour. Linn. Soc., xiv, 587, ... 46
Lineata (Scalaria), Kiener (in part). Iconog., g, t. 2, f. 5, not Say. = S. lyra, Sowb. 59
Lineata (Scalaria), Say. Amer. Conch., No. 3, t. 27, . . 79

PAGE.

Lineolata (Scalaria), Hutton (not Kiener). Cat. Mar. Moll. N. Z., p. 22; Jour. Linn. Soc. N. S. W., ix, 943.
= S. tenella, Hutton. 84
Lineolata (Scalaria), Sowb. Thes. Conch., i, 89, . . . 59
Lirata (Aclis), A. Ad. Ann. and Mag., vi, p. 119, 1860, . 90
Longissima (Scalaria), Seguenzia. Form. Terz. Reggio, p. 266, 1879, ... 75
Lovenii (Scalaria), A. Ad. Zool. Proc., p. 1, 1856, . . 76
Loveniana (Aclis), A. Ad. Ann. and Mag. Nat. Hist., p. 43, 1861, ... 90
Lusitanica (Solariella), Fischer. Jeffreys. Zool. Proc., 44, 1885. = Seguenzia reticulata, Phil. 48
Lyra (Scalaria), Sowb. Thes. Conch. Zool. Proc., p. 13, 1844, 59
Lyra (Scalaria), Hutton (not Sowb.) Man. Mar. Moll. N. Z., p. 70. = S. tenella, Hutton. 84

Maculosa (Scalaria), Ad. and Rve. Voy. Samarang, p. 51, t. 11, f. 14, 1850, ... 59
Magellanica (Scalaria), Ph. Archiv. für Naturg., i. p. 65, 1845, ... 76
Magnifica (Scalaria), Sowb. Thes. Conch., i, p. 102, t. 34, f. 103, 1847, ... 78
Mariei (Scalaria), Crosse. Journ. de Conch., p. 136, 1873, . 59
Marmorata (Scalaria), Sowb. Zool. Proc., p. 11, 1844, . . 56
Martinii (Scalaria), Wood. Index Test. 78
Megamastoma (Ianthina), A. Ad. Ann. and Mag., viii, p. 403, 1861, ... 38
Menesthoides (Acirsa), Cpr. Ann. and Mag., xiii, p. 478, 1864, ... 84
Menippe, Jeffreys. Brit. Conch., iv, 107, 1867.
= Pherusa, Jeffreys. 53
Micra (Aclis), Petterd. Journ. of Conch., iv, p. 136, 1884, . 90
Micromphala (Scalaria), Mörch. Journ. Philad. Acad., viii, p. 197, 1875, ... 83
Microsoma (Scalaria), Tap.-Canefri. Journ. de Conch., p. 251, 1876. = S. subauriculata, Souverb. 67
Migrans (Trichotropis), Dall. Bull. Mus. Comp. Zool., ix, p. 71, 1882, ... 45
Millecostata (Scalaria), Pse. Zool. Proc., p. 400, 1860, . . 84
Mindoroensis (Scalaria), Sowb. Zool. Proc., p. 40, 1844, . 67
Minor (Ianthina nitens, var.), Monts. En. e Sin., p. 35.
= I. globosa, Swains. 37
Minor (Ianthina pallida, var.), Monts. En. e Sin., p. 35.
= I. læta, Monts. 37
Minor (Scalaria), Sowb. Reeve's Conch. Icon., sp., 70, 1873, 83
Minutissima (Aclis), Watson. Challenger Exped., xv, 504, 1886, ... 88
Miranda (Scalaria), Smith. Zool. Proc., p. 734, t. 75, f. 15, 1871, ... 60

PAGE.

Miranda (Crosseia), A. Adams. Ann. Mag., N. Hist., Apr., 1865, ... 84
Mitraeformis (Scalaria), Sowb. Zool. Proc., p. 12, 1844, . 63
Mizon (Aclis), Watson. Journ., Proc. Linn. Soc., xv, p. 245, 1881, ... 89
Modesta (Scalaria), C. B. Ad. Jamaica Shells. . . . 70
Monocingulata (Seguenzia), Seguenza. Boll. Comitato Geologico, vii, 188, May, 1876, ... 46
Monocycla (Scalaria), Kien. Iconog., t. 3, f. 9.
= S. lamellosa, Lam. 74
Monocycla (Scalaria), Lam. Anim. sans Vert., vi, Pt. 2, p. 225. = S. lamellosa, Lam. 74
Montrouzieri (Recluzia), Souv. Journ. de Conch., xix, p. 334, 1871; xx, t. 1, f. 8, 1872. = R. Rollandiana, Petit. . 38
Mörchi (Scalaria), Angas. Zool. Proc., p. 15, t. 1, f. 7, 1871, 82
Mörchi (Scalaria,) Sowb. (not Angas). Reeve, Conch. Icon., f. 76, 1873. = S. erronea, Canefri. 79
Multicostata (Scalaria), Sowb. Zool. Proc., p. 28, 1844, . 67
Multiperforata (Scalaria), Sowb. Conch. Icon., sp. 125, 1874, 82
Multistriata (Scalaria), Phil. (not Say). Zeitsch. Mal., 108, 1844. = S. Algeriana, Weink. 64
Multistriata (Scalaria), Say. Amer. Journ. Sci., No. 3, t. 27, 72
Muricata (Scalaria), Risso. Hist., iv, p. 113, f. 45, . . 63

Nana (Ianthina), Gray. Fig. Moll. Anim., t. 48, f. 3.
= I. globosa, Swains. 37
Nana (Scalaria), Jeffreys. Zool. Proc., p. 134, t. 10, f. 6, 1884, ... 58
Nautlæ (Scalaria), Mörch. Journ., Phila. Acad., viii, p. 202, 1875, ... 75
Neglecta (Scalaria), Reeve. Conch. Icon., sp. 1, 1873 (not Ad. and Reeve). = S. Pallasii, Kiener. 54
Neglecta (Scalaria), Ad. and Rve. Voy. Samarang, p. 61, t. 11, f. 15, 1850, ... 55
Nicobarica (Scalaria), Beck. MSS. Thes. Conch., i, 83.
= S. Pallasii, Kien. 54
Nisoides (Odostomia), Brugn. Misc. Mal., p. 8, f. 8, 1875. .
= Aclis Walleri, Jeffr. 87
Nitens (Ianthina), Menke. Synopsis, p. 84, 1828.
= I. globosa, Swains. 37
Nitida (Seguenzia monocingulata, Var.), Verrill. Trans. Coun. Acad., vi, 188, ... 47
Nitida (Ianthina), A. Ad. Zool. Proc., p. 620, 1868, . . 38
Nodosa (Scalaria), Cpr. MS. Sowb. Conch. Icon., sp. 2.
= S. gradata, Hinds. 62
Notha (Scalaria), Mke. Synopsis, p. 85, 1828.
= S. Pallasii, Kien. 54
Nov-Angliae (Scalaria), Couth. Bost. Journ., No. 1, t. 3, f. 5, 71

PAGE.

Novemcostata (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 193, 1875, ... 83
Nuda (Scalaria), Sowb. Conch. Icon., sp. 110, 1874. = S. turricula, Sowb. 79

Obesa (Scalaria), Sowb. Thes. Conch., i, p. 89, t. 33, f. 70, 71, 1847, ... 55
Obliqua (Scalaria), Sowb. Thes. Conch., i, p. 89, t. 33, f. 69, 1847, ... 67
Obtusa (Scalaria), Sowb. Zool. Proc., p. 29, 1844, . . 58
Obtusicostata (Scalaria), G. O. Sars. Moll. Arct. Norv., p. 194, t. 22, f. 9a, b. =S. coarctata, Jeffreys. . . . 76
Occidentalis (Scalaria), Nyst. Tableaux, p. 48, 1873, . . 63
Ochotensis (Scalaria), Middendorff. Malac. Rossica, ii, p. 98, 1849, ... 76
Octocostata (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 198, ... 83
Opalia, Carpenter. Ann. Mag. N. Hist., 3d Ser., xv, 1865. = Psychrosoma, Canefri. 50
Opalia, H. and A. Adams. Genera of Recent Moll., i, 222, 1853, ... 50
Optabilis (Scalaria), A. Ad. Zool. Proc. Sowb. Reeve's Conch. Icon., sp. 85, 1873, ... 56
Orbignyi (Ianthina), Mörch. Journ. de Conch., p. 278, 1860, = I. fragilis, Lam. 36
Orbignyi (Scalaria), Nyst. Tableaux, p. 48, 1873, . . 70
Ovalis (Scalaria), Sowb. Zool. Proc., p. 29, 1844, . . 69

Pallasii (Scalaria), Kien. Coq. Viv., p. 4, t. 2, f. 3, . . 54
Pallida (Ianthina), Harvey (MSS.). Thompson, Ann., t. 2, f. 6, 1841. = I. globosa, Swn. Var. 37
Patula (Ianthina), Ph. Enum. Moll. Sicil., ii, p. 224, t. 28, f. 14, 1844. = I. pallida, Harvey. 37
Paumotensis (Scalaria), Pse. Amer. Journ. Conch., iii, p. 289, t. 24, f. 11, 1867, ... 65
Pecchioliana (Scalaria), Issel. = S. frondosa, Sowb. . . 65
Penicephala (Ianthina), Peron. Voy., t. 27, f. 7. =I. fragilis, Lam. 36
Peramabilis (Iphinoe), Dall. Amer. Journ. Conch., vii, p. 119, 1872, ... 45
Pernobilis (Scalaria), Fisch. and Bern. Journ. de Conch., p. 293, t. 8, f. 23, 1854, ... 65
Perplexa (Scalaria), Pse. Zool. Proc., 1860, Amer. Jour. Conch., iii, 228. = S. lamellosa, Lam. 74
Pherusa, Jeffreys. Brit. Conch., v, 210, 1869, . . 52, 89
Philippii (Turritella), Aradas. Boury, Jour. de Conch., 151, 1878. = Scalaria subdecussata, Cantr. 80
Philippinarum (Scalaria), Sowb. Zool. Proc., p. 12, 1844, . 66

PAGE.
Philtata (Scalaria), Watson. Challenger Reports, xv, 142, 1886, ... 74
Planicosta (Scalaria) Kien. t. 7, f. 21.
= S. Groenlandica, Chemn. 76
Planicostata (Scalaria), Bivona. Nuove Genera, t. 2, f. B.
= S. Turtonis, Turton, ... 72
Planospirata (Ianthina), Ad. and Rve. Voy. Samarang, p. 54, t. 11, f. 10, 1850, ... 36
Plicata (Eglisia), Hutton. Cat. Marine Moll. N. Zeal., p. 29, 1873, ... 86
Polita (Scalaria), Sowb. Zool. Proc., p. 30, 1844, . . . 69
Polita (Aclis), Verrill. Amer. Journ. Sci., iii, p. 210, t. 6, f. 5, 1872. = Eulimella, Vol. viii, p. 342, ... 90
Porrecta (Scalaria), Hinds. Zool. Proc., p. 126, 1843, . . 63
Pourtalesii (Scalaria), Verrill and Smith. Amer. Journ. of Sci., xx, p. 395, 1880, ... 64
Præclara (Scalaria), A. Ad. Ann. and Mag., viii, p. 481, 1861, ... 84
Praelonga (Acirsa), Jeffreys. Ann. and Mag., xix, p. 241, 1877, ... 83
Pretiosa (Scalaria), Lam. Anim. sans Vert., vi, Pt. 2, 225, 1819, ... 54
Pretiosula (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 192, 1875, ... 83
Principalis (Scalaria), Pallas. Spicil, x, 32, 1774, Naturg. x, 51, t. 3, f. 3, 6. Mörch. Jour. Philad. Acad., 2 ser., viii, 193, 57
Principalis (Turbo), Chemn. (not Pallas).
= S. magnifica, Sowb. 78
Principalis (Scalaria), Sowb. (not Pallas). Thes. Conch., i, p. 88, t. 34, f. 75. = S. ducalis, Mörch. 69
Producta (Scalaria clathratula, var.), Jeffreys. Zool. Proc., p. 136, 1884, ... 73
Prolongata (Ianthina), Blainv. Dict. Sci. Nat., xxiv, p. 155, 1822. = I. globosa, Swains. 37
Pseudopulchella (Scalaria), Seguenza.
= S. Trevelyana, Leach. 72
Pseudo-scalata (Scalaria), Chemn. Conch. Cab., iv, p. 275, f. 1438. = S. spuria, Mörch. 83
Pseudoscalaris (Scalaria), Brocchi. p. 379, t. 7, f. 1, 1814.
= S. lamellosa, Lam. 74
Psychrosoma, Canefri. Jour. de Conch., xxiv, 154, 1876, . 50
Pulchella (Scalaria), Bivona. Nuove Genera, 21, . . 73
Pulcherrima (Scalaria), Monts. Notiz. Conch. Medit., p. 39.
= S. formosa, Mts. 83
Pulcherrima (Scalaria), Sowb. Conch. Icon., sp. 68.
=S. Catanuanensis, Sowb. 61
Pulcherrima (Scalaria), Sowb. Zool. Proc., p. 28, 1844, . 68
Pumicea (Scalaria), Brocchi. Conch. Foss. Subap., ii, p. 380, t, 7, f. 3, 1884, ... 81

PAGE.

Pumila (Scalaria), Libassi. = S. frondosa, Sowb. . . 65
Pumila (Scalaria), A. Ad. Zool. Proc. Conch. Icon., sp. 79, 1873, ... 68
Pumilio (Scalaria eburnea, var.), Mörch. Journ. Phila. Acad., viii, p. 199, 1875, ... 71
Pusilla (Trichotropis), Gld. Bost. Proc., iii, p. 197, 1850, . 45
Pyramidalis (Scalaria), Sowb. Zool. Proc., p. 12, 1844, . 62
Pyrrhias (Acirsa), Watson. Challenger Reports, xv, 145, 1886, 80

Quadricarinata (Trichotropis), A. Ad. Ann. and Mag., viii, p. 135, 1861. = T. borealis, Brod. and Sowb. . . . 43
Quindecemcostata (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 197, 1875, ... 83

Raphistoma, Hall. Pal. N. Y., i, 1847, ... 35
Raricosta (Scalaria), Costa. Cat. Syst., 104. = S. crenata, Linn. 77
Raricostata (Scalaria), Lam. Anim. sans Vert., Ed. 2, ix, p. 76, ... 78
Raricostata (Scalaria), Cpr. Mazatlan Shells, p. 447. = S. Carpenteri, Tap. Canefri. 84
Recluzia, Petit. Jour. de Conch., 116, 1853, . . 35, 38
Reflexa (Scalaria), Cp. Zool. Proc., p. 235, 1855, . . 84
Replicata (Scalaria), Sowb. Zool. Proc., p. 11, 1844, . . 56
Reticulata (Seguenzia), Phil. Enum. Moll. Sicil., ii, p. 149, t. 25, f. 6, 1844; Jeffreys, Zool. Proc., 43, 1885, . . 48
Reticulata (Scalaria), Helbling. Abhandl. Privat Gesell. Bohm., iv, t. 1, f. 11, 1779. = S. raricostata, Lam, . . 79
Retiporosa (Opalia), Cpr. Calif. Proc., iii, p. 222, 1868, . 84
Riisei (Scalaria turritellula, var.), Mörch. Journ. Phila. Acad., viii, p. 202, 1875, ... 83
Rollandiana (Recluzia), Petit. Journ. de Conch., p. 119, t. 5, f. 12, 1853, ... 38
Rosea (Ianthina), Anthon. Verzeichniss, p. 50, 1839. = I. pallida, Harvey. 37
Roseola (Ianthina), Rve. Conch. Icon., sp. 1, 1858. = I. fragilis, Lam. Var. 37
Rotundata (Ianthina), Leach MS. Dillwyn. Contr. Hist. Swansea, 59, 1840. = I. Britannica, Leach. . . . 37
Rubrolineata (Scalaria), Sowb. Thes. Conch., i, p. 91, t. 34, f. 83, 84, 1847, ... 60
Rugosa (Scalaria), Costa. = S. frondosa, Sowb. . . . 65
Rupicola (Scalaria), Kurtz. Shells of North Carolina, p. 7, 1860, ... 83
Ruzeri (Trichotropis), Braz. Linn. Soc. N. S. W., i, p. 313. 1876 (misprint for Kroyeri, Phil.). 44

Sarissa (Aclis), Watson. Journ. Linn Soc., xv, p. 247, 1881, 88
Scacchii (Scalaria), Hörnes. Foss. Tert. Wein., i, p. 479, t. 46, f. 12, 1851. = S. Hellenica, Forbes. 73

PAGE.

Scaeve (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 204, 1875, ... 83
Scala, Klein. Ostracol., 52, 1753. = Scalaria, Lam. . . 50
Scalina. Conrad. Am. Jour. Conch., i, 27, 1865, . . . 50
Scaliola, A. Ad. Ann. Mag. N. Hist.. vi, 120, 1860, . 51, 85
Scalaria. Lam. Syst. An. 88, 1801, ... 49
Scalaris (Turbo), Linn. Syst. Nat. edit. Gmelin, 3603. = Scalaria pretiosa, Lam. 54
Scalites, Conrad. Emmons, Geol. N. Y., ii, 1842, . . 35
Schultzii (Scalaria), Weink. Conch. Mittelm., ii, 239; Jeffreys, Zool. Proc., 134, 1884. = S. Algeriana, Weink. 64
Scintillans (Ebala), A. Ad. Ann. Mag. N. Hist., vii, 44, 1861, ... 90
Scitula (Iolæa), A. Ad. Ann. and Mag. Nat. Hist., 1860; Journ. de Conch., xvi, t. 4, f. 3, 1868, ... 89
Sculptilis (Iolæa), A. Ad. Ann. and Mag. Nat. Hist., p. 303, 1861, ... 90
Seguenzia, Jeffreys Proc. Roy. Soc., 200, 1876; Watson, Challenger Exped., xv, 105; Verrill, Trans. Conn. Acad., vi, 186; Jeffreys, Jour. Linn. Soc., xiv, 605, . . 41, 46
Semidisjuncta (Scalaria), Jeffreys. .Zool. Proc., p. 135, t. 10, f. 7, 1884, ... 57
Senegalensis (Scalaria), Maltzan. Nachr. Deutsch. Malak., xvii, p. 26, 1885, ... 84
Separatista, Gray. Zool. Proc., 136, 1847. . . . 41, 45
Serrata (Scalaria), Calcara. Conch. Foss. d' Alta, p. 47, t. 2, f. 4. ? = S. pumicea, Brocchi, ... 82
Similis (Scalaria), Sowb. Zool. Proc., p. 27, 1884, . . 60
Simillima (Scalaria), Tap.-Canefri. Journ. de Conch., p. 152, 1876. = S. ducalis, Mörch. 69
Smithii (Scalaria), Tryon, ... 60
Smithia, Maltzan. 1883. = Eglisia, Gray. . . 52, 86
Smithiæ (Ianthina), Rve. Conch. Icon., sp. 15, 1858. = I. Britannica, Leach. 47
Solida (Trichotropis), Aurivill. Arktiska Hafsmoll., p. 328, t. 12, f. 16, 1885. = T. Kroyeri, Phil. 44
Soluta (Scala), A. Ad. Ann. and Mag., ix, p. 296, 1862, . 84
Soluta (Scalaria), Tiberi. Journ. de Conch., p. 84, t. 5, f. 3, 1868. = S. frondosa, Sowb. 65
Soluta (Scalaria), Dunker MS. Mörch, Journ. Philad. Acad., viii, 195, 1876, ... 57
Sowerbianus (Trichotropis), Lesson. Illust. de Zool., t. 41, f. 1–3, 1832. = T. bicarinata, Brod. and Sowb. . . . 42
Spectabilis (Trichotropis bicarinata, var.), Dall. Am. Jour. Conch., vii, 120, 1872, ... 42
Spinae-rosae (Scalaria), Mörch. Journ. Phila. Acad., viiii, p. 194, 1875, ... 83
Spinosa (Scalaria clathratula, var.), Jeffr. Zool. Proc., p. 136, 1884, ... 73

PAGE.

Spirata (Eglisia), Sowb. Tank. Cat. App., p. 14, No. 1449, . 86
Spiralis (Scalaria), A. Ad. Ann. and Mag., viii, p. 481, 1861, 84
Splendens (Ianthina), Monts. Nomen. Gen. e Spec., .p 104, 1884. = I. globosa, Swains. 37
Spongiosa (Opalia), Cpr. Calif. Proc., iii, p. 222, 1868, . 84
Spuria (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 194, 1875, ... 83
Statuminata (Scalaria), Sowb. Zool. Proc., p. 30, 1844, . 58
Sthenorytis, Conrad. 1868, ... 50
Stilbe, Jeffreys. Zool. Proc., 130, 1884, ... 53
Striata (Scalaria), Gray. Voy. of the Fly, ii, p. 358, t. 2, f. 5, 1847. = S. dubia, Sowb. 60
Striata (Aclis), Verrill. Proc. U. S. Nat. Mus., iii, p. 377, 1880, ... 87
Striata (Crossea), Watson. Journ. Linn. Soc., xvi, p. 609, 1883, ... 86
Striata (Mesalia), A. Ad. Zool. Proc., p. 279, 1851. = S. subdecussata, Cantr. 80
Striata (Scalaria), Kien. Coq. Viv., p. 20, t. 5, f. 14. = S. Martini, Wood. 78
Striatissima (Scalaria), Monts. Journ. de Conch., p. 151, 1878, ... 83
Striatus (Cioniscus), Jeffr. Zool. Proc., p. 342, 1884. = Aclis Jeffreysii, Tryon. 89
Striolata (Ianthina), Ad. and Rve. Voy. Samarang, p. 54, t. 11, f. 9, 1850. = I. pallida, Harvey. 37
Striulata (Ianthina), Carp. Mazat. Cat., 185. = I. fragilis, Lam. 36
Subauriculata (Scalaria), Souverb. Jour. de Conch., xiv, 147, 260, 1866, ... 67
Subcoronata (Scalaria), Cpr. Calif. Proc., iii, p. 221, 1868, . 84
Subnudata (Scalaria), Sowb. Conch. Icon., sp. 111, 1874. = S. tenera, H. Adams. 62
Subdecussata (Scalaria), Cantraine. Mal. Medit. . . . 80
Subpretiosa (Scalaria), Blainv. = S. Pallasii, Kiener. . 54
Subtilis (Scalaria), Sowb. Zool. Proc., p. 28, 1844, . . 68
Subulata (Scalaria), Couth. Jour. Bost. Soc. Nat. Hist., ii, No. 1. = S. Grœnlandica, Chemn. 76
Subvaricosa (Scalaria), (Dkr. MSS.), Mörch. Journ. Phila. Acad., viii, p. 204, 1875, ... 83
Sulcata (Aclis), A. Ad. Ann. and Mag., vi, p. 119, 1860, . 90
Sulcata (Scalaria), Sowb. Thes. Conch., t. 35, f. 111, . . 68
Supranitida (Aclis), Searles-Wood. Crag Moll., 99, 1842, . 87
Suturalis (Scalaria), Hinds. Zool. Proc., p. 125, 1843, . . 79
Suturalis (Turritella), Gray. Wood's Ind. Test. = E. spirata, Sowb. 86
Swiftii (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 193, t. 29, f. 3, 1875, ... 58

PAGE.

Symmetrica (Scalaria), Pse. Amer. Journ. Conch., iii, p. 290, t. 24, f. 14, 1867, ... 66

Tantilla (Constantia), A. Ad. Ann. and Mag., viii, p. 483, 1861, ... 84
Tenella (Scalaria), Hutton. Jour. Linn. Soc. N. S. W., ix, 943, 1885, ... 84
Tenera (Scalaria), Jeffreys. Zool. Proc., p. 139, t. 10, f. 9, 1884. = S. Jeffreysii, Tryon, ... 62
Tenera (Scalaria), H. Adams. Zool. Proc., 209, 1873, . . 61
Tenuicostata (Scalaria), Mich. Bull. Soc. Linn. Bord., iii, p. 260. = S. Turtonæ, Turton. 72
Tenuicostata (Scalaria), Sowb. Thes. Conch., i, t. 34, f. 76, 1847, ... 56
Tenuilirata (Scalaria), Sowb. Conch. Icon., sp. 118, 1874, . 57
Tenuis (Aclis), Verrill. Conch. Trans., v, p. 628, t. 58, f. 19, 1882, ... 87
Tenuis (Scalaria), Gray. King's Narrative, ii, App., p. 482. = S. ducalis, Mörch. 69
Tenuis (Scalaria), Sowb. (not Gray). Zool. Proc., p. 110, 1844. = S. occidentalis, Nyst. 63
Tenuis (Trichotropis), E. A. Smith. Ann. and Mag., xx, p. 135, 1877; Jeffreys, Ibid., 239.
= T. bicarinata, Brod. and Sowb. (monstrosity), . . 42
Tenuistriata (Scalaria), d'Orb. Voy. Amer. Merid., p. 390, t. 54, f. 4–6, ... 61
Teres (Scalaria), Bush. Conn. Trans., vi, p. 465, t. 45, f. 8, 1885, ... 71
Texturata (Scalaria), Gld. Bost. Proc., ii, p. 252, 1847, . 66
Tiarella (Torellia fimbriata, Var.), Verrill. Trans. Conn. Acad., v, 520, 1882, ... 46
Tincta (Scalaria), Carp. Ann. Mag. N. Hist., 3 ser., xiv, 28, 1865. = S. Indianorum, Carp., Var. 70
Torellia (Lovën), Jeffreys. Brit. Conch., iv, 244, 1867, 41, 46
Tortilis (Scalaria), Watson. Journ. Linn. Soc., xvi, 607, 1883, ... 75
Trabeculata (Scalaria), A. Ad. Ann. and Mag., viii, p. 480, 1861, ... 84
Trachyoma, Seguenza. Tert. Reggio, 1879.
= Torellia, Jeffreys. 41
Trevelyana (Scalaria), Leach. Winch, Ann. Phil. N. S., iv, 434, ... 72
Trevelyana (Scalaria), Tib. (not Leach). = S. muricata, Risso. 63
Tricarinata (Eglisia), Ad. and Reeve. Voy. Samarang, p. 49, 86
Tricarinata (Seguenzia). Jeffreys. Zool. Proc., p. 43, t. 5, f. 2, 1885, ... 47
Tricarinata (Trichotropis), Braz. Linn. Soc. N. S. W., i, p. 312, 1876, ... 45

PAGE.

Trichophora, Deshayes. Encycl. Meth., iii, tabl., 1830.
= Trichotropis, Brod. and Sowb. 40
Trichotropis, Brod. and Sowb. Zool. Jour., iv, 373, 1829, 40, 43
Trifasciata (Scalaria), De Haen. Sowb., Thes. Conch., i, t. 33, f. 42–44. = S. Clementina, Grat. 56
Trispinosa (Seguenzia), Watson. Jour. Linn. Soc., xiv, 591, 47
Tristriata (Aclis), Tenison-Woods. Roy. Soc. Tasmania, p, 150, 1876, ... 90
Trochiformis (Scalaria), Maltzan. Nachr. Deutsch. Malak., xvii, p. 25, 1885, ... 84
Trochoidea (Ianthina), Rve. Conch. Icon., sp. 10, 1858.
= I. fragilis, Lam., Var. 37
Turbinata (Scalaria), Conrad. Journ. Phila. Acad., vii, p. 263, t. 20, f. 26, 1834; Proc. A. N. S., 302, 1878, . . 64
Turbona (Browne), Mörch. Jour. Philad. Acad., viii, 198, 1876, ... 50
Turbonilla (Cirsotrema), A. Ad. Ann. and Mag., viii, p. 483, 1861, ... 84
Turricula (Scalaria), Sowb. Thes. Conch., i, p. 92, t. 33, f. 61, t. 34, f. 88, 1847, ... 79
Turrita (Recluzia), V. D. Busch., 1847. (Phil. Zeitsch., p. 15, 1847.) 39
Turrita (Scalaria), Nyst. Tableaux, p. 66, 1873.
= S. turricula, Sowb. , ... 79
Turrita (Aclis), Petterd. Journ. of Conch., iv, p. 140, 1884, 90
Turritellula (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 202, 1875, ... 83
Turtonis (Scalaria), Turton. Conch. Dict., 208, . . . 72

Umbilicata (Scalaria), Pse. Amer. Journ. Conch., v, p. 76, 1869, ... 84
Umbilicata (Ianthina), d'Orb. Voy. Amer. Merid., No. 319, 1840. ? = I. exigua, Lam. 38
Umbilicatus (Fusus), Brown, Wernerian Memoirs, viii, 98, t. 1, f. 2. = Trichotropis borealis, Brod. and Sowb. . . 43
Uncinati-costa (Scalaria), d'Orb, Moll. de Cuba, ii, p. 19, t. 11, f. 25–27, 1853, ... 77
Undecemcostata (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 198, ... 71
Undulata (Scalaria), Sowb. Thes. Conch., t. 35, f. 136.
= S. costulata, Mighels. 80
Undulatissima (Scalaria), Sowb. Conch. Icon., sp. 121, 1874, 60
Unicarinata (Trichotropis), Brod. and Sowb. Zool. Journ., iv, 376, ... 44
Unicostata (Scalaria), Sowb. Conch. Icon., sp. 55.
= S. lineata, Say. 79
Unicus (Cioniscus), Montagu. Test. Brit., 290, . . . 88
Unifasciata (Scalaria), Sowb. Thes. Conch., i, t. 33, f. 68, . 71

PAGE.

Varicosa (Scalaria), G. O. Sars. Moll. Arct. Norv., p. 348, t. 34, f. 9, a,–c. = S. coarctata, Jeffreys. 75
Varicosa (Scalaria), Lam. Anim. sans Vert., vi, 227, . . 81
Venosa (Scalaria), Sowb. Zool. Proc., p. 13, 1844, . . 70
Ventrosa (Aclis), Jeffreys. Friele, Bidrag til Vestland. Moll., p. 5, t. 1, f. 7, 7a, 7b, 1875, ... 87
Verena, Gray. Guide Brit. Mus., 44, 1857. = Ariadna, Fischer. 40
Vermetiformis (Scalaria), Watson. Challenger Exped., xv, 142, 1886, ... 57
Vestalis (Scalaria), Hinds. Zool. Proc., p. 125, 1843, . . 69
Vestalis (Ebala), A. Ad. Ann. and Mag., vi, p. 119, 1860, . 90
Vestita (Torellia), Jeffr. Brit. Conch., iv, p. 244, t. 4, f. 1, 1867, ... 46
Vinsoni (Ianthina), Desh. Moll. Reunion, p. 94, t. 11, f. 9, 10. = I. exigua, Lam. 38
Violacea (Ianthina), Blainv. Man. Mal., t. 27b, f. 1. = I. globosa, Swainson. 37
Violacea (Ianthina), Ad. Gen., p. 86, t. 69, f. 1. = I. Costæ, Mörch. 36
Violacea (Ianthina) (Bolt.), Mörch. Yoldi Cat., 49. = I. fragilis, Lam. 36
Virginea (Ebala), A. Ad. Ann. and Mag., vi, p. 119, 1860, 90
Vittata (Scalaria), Jeffr. Zool. Proc., p. 133, t. 10, f. 4, 1884, 64
Volubilis (Scalaria), Mörch. Journ. Phila. Acad., viii, p. 195, 1875, ... 83
Vulgaris (Ianthina), Gray. Fig. Moll. Anim., t. 117a, fig. 3. = I. Costæ, Mörch. 36
Vulpina (Scalaria), Hinds. Zool. Proc., p. 125, 1843, . . 78

Walleri (Aclis), Jeffreys. B. C., iv, p. 105; v, p. 210, t. 72, f. 4, ... 87
Webbii (Scalaria), d'Orb. Moll. des Canaries, p. 80, t. 6, f. 14–16, ... 73
Wellingtonensis (Scalaria), Kirk. Trans. New Zeal. Inst., xii, p. 307, 1880; Trans. Linn. Soc. N. S. Wales, ix, 943. = S. Jukesiana. Forbes. 66
Wroblewskyi (Scalaria), Mörch. Journ. Philad. Acad., 2d Ser., viii, 190, 1876. = S. borealis, Gould, . . . 76

Zelebori (Scalaria), Frauenfeld. Reise Fregatte Novara, ii, pt. 3, p. 7, t. 1, f. 6, 1868, ... 78

Family *CERITHIIDÆ.*

Shell spiral, elongated, many whorled, frequently varicose, the surface usually tuberculated, spinose or costulate; aperture channeled in front, the outer lip generally expanded in the adult. Operculum corneous, spiral with central or sublateral nucleus.

Animal with a short contractile muzzle, distant, slender tentacles and eyes on peduncles connate with the tentacles or sessile at their base; mantle margin with a short, rudimentary siphonal fold.

Dentition.—The usual formula is 2·1·1·1·2 (Pl. 19, figs. 1, 2), but in Triforis the marginal teeth are multiplied 4·1·1·1·4 (Pl. 19, fig. 3).

The Cerithiidæ occur principally about tropical and semitropical shores, on rocks or among marine plants, littoral or in shallow waters. Many of them are estuary mollusks, and some inhabit fresh waters.

The shell is very variable in form, and especially in the anterior canal of the aperture, which is always short, but sometimes disappears completely.

The Cerithiidæ have been monographed by:

Kiener. Coquilles vivantes. 81 species. No date.

Sowerby. Thesaurus Conchyliorum, ii. 184 species. 1855.

Sowerby. Reeve's Conchologia Iconica, xv. 232 species. 1865–6.

Dr. Jousseaume has recently published a monograph of Triforis, —of which he has made a family, with a number of genera (*Bull. Soc. Mal. France, i*, 217, 1884).

Genus CERITHIUM, Adanson, 1757.

Shell turreted, imperforate, many whorled, tuberculate usually, with indistinct varices; aperture small, with a short posterior channel and a better marked oblique one in front, outer lip expanded, inner lip thickened, concave. Operculum corneous, paucispiral, with submarginal nucleus. Animal (Pl. 19, figs. 14, 13) truncated and grooved in front, attenuated behind; muzzle large and long, sinuated at the end, tentacles thickened posteriorly and bearing eyes externally at a short distance from their base; siphon short. Foot secreting a mucous thread by which the animal is able to suspend itself (Pl. 19, fig. 6). Some of the species emit a bright green fluid when molested.

Central tooth of the radula multicuspidate, lateral securiform, the margin toothed, marginals narrow, with comb-like extremities (Pl. 19, fig. 1).

Marine, inhabiting temperate and tropical seas; fossil, nearly 500 species are enumerated, commencing in the Trias and attaining its maximum development in the Cretaceous.

Subgenus CERITHIUM (sensu stricto).

Columella thickened, with a tooth-like posterior tubercle, outer lip dilated at the base, whorls varicose.

Section COLINA, H. and A. Adams, 1853.

Shell elongated, whorls numerous, convex, nodulous, spirally striated, aperture oval, prolonged in front into a short recurved canal, columella simple, oblique, outer lip expanded and reflexed. Middle whorls gibbous, sculpture usually obsolete on the last whorl.

The few species inhabit deep water, sandy bottom, at the Philippines, China, etc.

Section LIOCERITHIUM, Tryon, 1887.

Shell pupoidal or subcylindrical, without ribs or nodules, usually spirally grooved. C. INCISUM, Sowb.

Subgenus STILUS, Jeffreys, 1885.

Shell spit-shaped, reticulated; apex forming a twisted and abruptly semi-detached peak; basal groove short and recurved. S. INSIGNIS, Jeffreys.

Subgenus CERITHIODERMA, Conrad, 1860.

Acutely ovate, striate; lip grooved, umbilicated, columella recurved inferiorly or subtruncate; aperture patulous, margin obtusely rounded inferiorly; beak very short, narrow, recurved.

Fossil only. C. PRIMA, Conr. Eocene, Alabama (Struct. and Syst. Conch., t. 69, f. 51).

? Subgenus BRACHYTREMA, Morris and Lycett, 1850.

Shell turreted, turbinate, solid, whorls nodose, costulate or cancellate, the last whorl large, ventricose, angulated; columella smooth, rounded, obliquely truncate at the base forming a short oblique canal, aperture obsoletely channeled above, lip thickened and usually exteriorly subvaricose. C. WRIGHTI, Cotteau (Pl. 19, fig. 8), 16 sp., Jurassic, Europe.

Has the general appearance of *Tectarius*, and I formerly referred it to that group; yet its anterior canal, and varicose lip remind one of *Cerithium*.

Subgenus VERTAGUS, Klein, 1753.

Canal long and strongly recurved, columella with an oblique median plication.

Rhinoclavis, Swainson, 1840, is a synonym.

Subgenus CAMPANILE, Bayle, 1884.

Shell very large; columella simple, or with plications throughout its length; aperture short; lip sinuous, oblique; canal strongly twisted.

C. LÆVE, Quoy and Gaim. is a typical living example of this group; which appeared in the upper Cretaceous and flourished during the Eocene period.

Subgenus BEZANCONIA, Bayle, 1884.

Suture strongly channeled, periphery continuous and detached. C. SPIRATUM, Lam. *Eocene of Paris basin.*

Subgenus BELLARDIA, Mayer, 1870.

Last whorl with a series of tubercles, separated by a narrow, partially closed transverse fissure. Fossil. C. JANUS, Mayer. Nummulite of Vincentin.

Subgenus CERITHINELLA, Gemmellaro. 1878.

Subperforate, very long, cylindrical or turreted, plicate, and spirally lined, growth lines recurved near the suture; aperture quadrangular with a very short canal, columella straight. Having the aspect of *Nerinæa*. C. ITALICA, Gemm. Jurassic of Sicily.

Subgenus PSEUDOCERITHIUM, Cossmann, 1884.

Shell elongated, narrow, multispiral, with axial ridges forming a sort of pyramid twisted on its axis; aperture entire, slightly twisted in front.

C. CONTORTUM, Deslongchamps. Jurassic of Normandy.

Subgenus TOMOCHILUS, Gemmellaro, 1879.

Subumbilicated, short, pupoid-conic, whorls cancellated; aperture rounded, oblique, channeled behind, dilated anteriorly, columella thick, forming a slight depression at the base.

C. DESLONGCHAMPSI, Gemm. Jurassic of Sicily.

Genus FASTIGIELLA, Reeve, 1848.

Perforate, elongated, turreted; whorls numerous, convex, with spiral riblets; aperture terminating in a short, slightly twisted canal.

One or two recent species occur in the West Indies, and several fossils from the Eocene of the Paris basin are also referred here.

Genus BITTIUM (Leach), Gray, 1847.

Shell elevated, with numerous granular whorls and irregular varices; anterior canal short, not recurved; inner lip simple, outer lip not reflected, usually with an exterior rib. Operculum four-whorled with central nucleus.

Animal with lanceolate foot, subtruncate in front; eyes placed at the external base of the rather long tentacles; operculigerous lobe with rudimentary expansions on the sides, siphon rudimentary.

Numerous small species inhabiting temperate waters.

Cerithiolum, Tiberi, 1869, and *Platygyra*, Mörch, 1860, are synonyms.

Section CERITHIDIUM, Monts., 1884.

Mouth somewhat rounded, scarcely showing any canal below. C. SUBMAMILLATUM, Rayn.

Genus POTAMIDES, Brongniart, 1810.

Imperforate, turreted, angulated, tuberculate, spiny, etc., and covered by a thick, olive-brown epidermis, apex often decollated; whorls numerous, narrow, the last short; aperture channeled in front, outer lip simple or thickened. Operculum corneous, multispiral.

Animal with subcircular foot, obtuse behind; eyes on the side of the tentacles at a third or half of their length; siphon usually fringed.

Middle tooth of the radula small with toothed margin, lateral tooth large, subrhomboidal, with a rostrated base and toothed margin, first marginal tooth narrow, with a slight posterior projection, second marginal tooth sometimes elongated and simple, sometimes with a large external wing (Pl. 19, fig. 2).

The type is a fossil, P. LAMARCKI, Brongniart.

Inhabits brackish and fresh waters, in Tropical countries, particularly swamps, and the mouths of rivers, where they frequently remain for long periods out of the water, and in the dry season

suspend themselves to mangrove roots, weeds, etc., by means of glutinous filaments proceeding from under their closed operculum (Pl. 19, fig. 6).

Subgenus Tympanotonos, Klein., 1753.

Shell with angular, spinose whorls; columella twisted, canal short; outer lip broadly sinuated anteriorly, and less distinctly so posteriorly. Animal with fringed siphon. P. fuscatus, Linn.

Subgenus Pyrazus, Montfort, 1810.

Whorls angular; aperture with a short anterior canal, prolonged posteriorly; outer lip thickened, expanded. Animal with fringed siphon. P. ebeninus, Brug.

Subgenus Pyrazisinus, Heilprin, 1886.

Combining the general characters of Tympanotonus and Terebralia, differing from the former in the non-canaliculate character of the aperture, and from the latter in the possession of a deep sinus in the labrum, which is effuse, thickened, and carried completely over to the labium, so as to enclose a round siphonal aperture, as seen in Terebralia.

P. campanulatus, Heilprin (Pl. 19, fig. 10). Tertiary, Florida.

Subgenus Terebralia. Swainson, 1840.

Shell with exterior varices and corresponding interior teeth, surface spirally channeled; aperture channeled behind, with short anterior canal; lip curved, dilated in front and prolonged so as to partially close the canal; columella with strong plications corresponding to the teeth on the interior of the outer wall (Pl. 19, fig. 4).

P. palustris, Brug., occurs in great numbers in the salt marshes of the Eastern Archipelago, and is assiduously collected by the natives, who roast them and suck the contents of the shell through an aperture made by breaking off the tip of the spire.

The internal teeth do not approach the aperture, and are only discovered by making a longitudinal section of the shell. They have not been found in any of the related groups.

The genus Brotia, H. Adams, 1866, is founded on *Melania pagodula*, Gould, a Burmese species resembling in general form *Terebralia Humboldti*, Val. Adams says that it has a multispiral operculum, and therefore places it under the above name in the Cerithiidæ. I agree with Dr. Brot that the species has so com-

pletely the aspect of a Melanian that it is very probable Adams was deceived as to his operculum really belonging to it.

Section GOURMYA. Bayle, 1884.

No internal plications or tubercles; outer surface smooth.

Section DITRETUS, Piette, 1874.

Turreted, with longitudinal rows of tubercles; outer lip thickened, prolonged below so as to close the canal—which is short, inner lip spread out, callous. P. ROSTELLARIA, Buv. Jurassic.

Subgenus TELESCOPIUM, Montfort, 1810.

Shell conical or trochoidal, of numerous flat whorls, the aperture subquadrangular, short, not channeled behind; lip thin, sinuous, prolonged at the base; columella interiorly plicate, plication visible near the suture.

P. telescopium is so abundant near Calcutta as to be used for burning into lime; great heaps of it being first exposed to the sun, to kill the animals. In Borneo it is an article of food.

Subgenus VICARIA, d'Archiac, 1854.

Turreted, spirally striated, with a row of tubercles next below the suture; canal very short, recurved, inner lip callously thickened, the callosity prolonged behind, where the aperture is channeled; outer lip strongly sinuated posteriorly.

P. VERNEUILI, d'Arch. Nummulite, India.

Subgenus PIRENELLA, Gray, 1847.

Shell turriculated, granose, with irregular ribs and varices; aperture rounded, terminating in a short anterior canal; inner lip simple, outer lip thin, sinuous. P. MAMILLATUS, Phil.

Subgenus CERITHIDEA, Swainson, 1840.

Turriculated, longitudinally ribbed; whorls numerous, apex more or less truncated; aperture rounded, slightly transversely slit anteriorly; outer lip expanded, thickened, broadly rounded below and usually produced into a beak, crossing the sinus to the left. Eye pedicels long and thick, connate with the tentacles nearly to their tips.

They are so commonly out of the water as to have been taken for land shells. P. DECOLLATUS, Linn.

Section APHANISTYLUS, Fischer, 1884.

Shell decollated, thin, last whorl carinated; lip not dilated, nor

prolonged in front. Ocular peduncles long, tentacles not visible. P. CHARBONNIERI, Petit (Pl. 19, fig. 5.). Von Martens suspects that the ends of the tentacles are bent back when the animal is at rest so as to become invisible; at least this is the case in *Potamides obtusus* (*Archiv fur Naturgeschichte*, li, 48).

Subgenus LAMPANIA, Gray, 1846.

Turriculated, a little curved, whorls without varices; aperture subtruncate at the base, with a scarcely distinct, straight canal; lip sinuous. P. ZONALE, Lam. *China*.

Batillaria, Cantor, 1842, is the same, and has priority; but *Lampania* is well established, and need not be changed.

Section LAMPANELLA, Mörch, 1876.

Shell small, decussated. P. MINIMUS, Gmel.

Subgenus ESCOFFIERIA, Fontannes, 1880.

Turriculated, narrow, whorls numerous, subsolute; aperture subcircular, with sharp lip, columella excavated, canal obsolete. P. FISCHERI, Fontannes. Upper Tertiary of the Rhone basin.

? Genus SANDBERGERIA, Bosquet, 1860.

Shell small, ornamented like *Bittium*, with a rudimentary broad, shallow, short canal, lip curved, prominent at the base, columellar extremity surrounded by a basal fasciole. Operculum said to be concentric and calcareous, but there is some doubt about this: if it is so, the group is certainly out of place in Cerithiidæ. S. ANTECEDENS, Stol. Tertiary.

Genus DIASTOMA, Desh., 1848.

Turriculated, with numerous ribs and a few varices; inner margin of the aperture partially detached from the previous whorl, the aperture is strongly contracted posteriorly, sinuous and subangular, but not channeled at the base, channeled behind, columella concave, simple.

D. VARICULOSUM, Desh. (*Struct. and Syst. Conch.*, t. 72, f. 50), Eocene.

? Genus MESOSTOMA, Desh., 1861.

Subrimate, elongated, turreted; aperture nearly circular, dilated, oblique, terminating in front by a semicanaliculated angle; columella slightly concave, lip simple, slightly expanded.

M. GRATUM, Desh. Eocene, Paris basin.

? Genus EXELISSA, Piette, 1860.

Shell small, elongated, subcylindrical, somewhat pupiform, many whorled, longitudinally costate, tuberculate, or spinose, last whorl tending to separate from the axis, contracted at the base; aperture orbicular, entire, the lip produced and slightly thickened, columella solid. *Kilvertia*, Lycett, 1863, is a synonym.

E. FORMOSA, Lycett (*Struct. and Syst. Conch.*, t. 69, f. 62). Oolite, *England*. A doubtful member of the family.

? Genus PTEROSTOMA, Deshayes, 1861.

Shell small, turreted, subcylindrical, whorls numerous, with longitudinal tubercular ribs, and spiral striæ; aperture circular, entire, margin dilated, exteriorly thickened.

P. TUBA, Desh. (*Struct. and Syst. Conch.*, t. 72, f. 42). Eocene, Paris basin.

Genus CERITHIOPSIS, Forbes and Hanley, 1853.

Small, imperforate, more or less cylindrical, narrow, tuberculate, not varicose; whorls numerous, the last narrower in proportion; aperture small, with a short, truncate, nearly straight canal. Operculum suboval, paucispiral, with sublateral, internal nucleus. Animal with a narrow foot, subtruncated in front and attenuated behind, with a longitudinal sulcus on the sole; tentacles cylindrical, the eyes sessile at their base; opercular lobe simple, well developed.

Radula with an oval central tooth, its margin dentate, a large, bicuspid lateral tooth, and unicuspid laterals with smooth margin. Mostly occurring in northern and temperate seas. Fossil, Cretaceous.

C. TUBERCULARIS, Mont.

Section METAXIA, Monts., 1884.

Base truncate, basal area not cingulate and concave, canal open, incipient. C. RUGULOSA, Sowb.

Section SEILA, A. Ad., 1861.

Shell with simple spiral ribs. C. DEXTROVERSA, Ad. and Reeve. *Cinctella*, Monts., is a synonym.

Section LOVENELLA, O. Sars., 1878.

Shell subulate; whorls numerous, cancellated, aperture terminating in a short, distinct, reflected canal. C. METULA, Lovën. *Northern Seas.*

Cerithiella, Verrill, 1882, is a synonym.

Section EUMETA, Mörch, 1868.

Lateral and marginal teeth of the radula finely pectinate. C. ARCTICA, Mörch. *Northern Seas.*

Subgenus LÆOCOCHLIS, Dunker and Metzger, 1874.

Shell sinistral, elongated, granose, canal twisted. L. GRANOSA, Wood. *Boreal Seas.*

The dentition of this species is as near that of *Trichotropis* as *Cerithiopsis*, and von Martens has put it in Trichotropidæ; but the affinities of the shell appear to be Cerithid.

Genus CERITELLA, Morris and Lycett, 1850.

Shell small, smooth, with sharp spire and flattened whorls, the last whorl large, ventricose; aperture elongated, oblique, narrow, terminating in a very short canal, slightly turned outwards, lip thin, columella smooth, rounded, subreflected at the base.

C. ACUTA, Morris and Lycett (*Struct. and Syst. Conch.*, t. 60, f. 57). Jurassic. *England.*

Section TUBIFER, Piette, 1856.

Shell formed like *Actæon*, the last whorl cylindrical, large; aperture long, the lip thin, simple, descending as far anteriorly as the canal; canal long, thin, tube-like.

C. NUDA, Piette. Jurassic.

Costellifer, Meek, 1863, may probably be referred here.

Section FIBULA, Piette, 1857.

Shell elongated; columella straight with a rudimentary umbilical groove near the base; outer lip notched at the suture; base of aperture with a slight canal, or rounded and entire, depending upon its age.

C. UNDULOSA, Piette (*Struct. and Syst. Conch.*, t. 60, f. 56). 21 sp. Jurassic to Cretaceous; *Europe*, *India.*

Genus EUSTOMA, Piette, 1855.

Shell when young resembling Cerithium; in the adult there is a long, narrow, nearly straight anterior canal, and an ascending posterior channel, the lip is dilated, and there is a large spreading columellar callosity.

E. TUBERCULOSUM, Piette (Pl. 19, fig. 7). Jurassic.

Genus TRIFORIS, Deshayes, 1824.

Shell elongated, sinistral, granular; whorls numerous; aperture

small, with tubular, short, anterior canal. Operculum paucispiral, with subcentral nucleus.

Animal with elongated foot, truncated in front, where it forms a duplicature, the upper margin (mentum of Lovén) less developed than the lower; tentacles long, cylindrical, united by a sinuated veil, eyes at their exterior base; snout very short; operculigerous lobe simple.

Dentition (Pl. 10, fig. 3).—Central tooth very short, transverse, multicuspidate; lateral tooth also transverse and multicuspid; marginals four, small, transverse, simple (4·1·1·1·4).

About a hundred living species are known, all quite small, inhabiting the West Indies, Europe, Indian Ocean, Polynesia. Fossil. Tertiary. *Tristoma*, Blainv., 1825, is a synonym. The Triforis often attains a considerable size before losing its larval characters, particularly when distant from the shore. Dr. Fischer has captured on the high sea, between Provence and Corsica, a *T. perversa*, of which the shell had eight or nine whorls, yet the animal still retained its larval vellum.

An anomaly of the shell is the occasional preservation of a second canal upon the back of the body whorl, showing the termination of a former aperture. This is present in the fossil species upon which Deshayes established his genus, and which is named from this character. Dr. Jousseaume, in his recent monograph of the group, divides the species according to the presence or absence of this posterior opening, and creates certain new groups, of his division having three apertures, which he admits are identical in other characters with the sections *Ino* and *Mastonia* of Hinds, which he places among those having two apertures. Having examined several species with three apertures I incline to the opinion that the posterior canal is only accidentally preserved in some cases by reason of its deflection, which causes its tube to be surrounded with shelly matter during the growth of the shell, and that it bears no relation to the economy of the animal. This view is fortified by the consideration that neither in this group nor in any other group of the mollusca are we acquainted with any organ which might occupy or occasion this tube for the purposes of its economy. Moreover, in one of the species before me two individuals possess the third opening, whilst two others have it not. In consequence of this view I relegate Dr. Jousseaume's groups *Iniforis* and *Mastoniæforis* to the synonymy of *Ino* and *Mastonia* respectively.

Section TRIFORIS (sensu stricto).

Shell longitudinally ribbed, with one or two spiral lines; aperture round, entire; canal closed.

T. PLICATA, Desh. Eocene, Paris basin.

The genera *Trituba*, *Stylia*, *Euthymia* and *Metalepis*, Jousseaume, 1884, are synonyms.

Section INO; Hinds, 1844.

Shell cylindrically subulate, elongated, with flattened whorls, tuberculated in spiral series, spire sharp-pointed; aperture entire, margin continuous.

T. CORRUGATA, Hinds. *Inella*, Bayle, 1879, was proposed because *Ino* has been used twice in Entomology, but I see no occasion for making the change for such reason at this late day. *Iniforis*, Jousseaume, 1884. is a synonym.

Section MASTONIA, Hinds, 1844.

Shell swollen in the middle, contracted and rounded at the base, tuberculated usually in two spiral series. T. VULPINA, Hinds. *Mastoniæforis*, Jousseaume, 1884, and *Monophorus*, Grillo, 1877 (=*Biforina*, B. D. D.), are synonyms,

Section VIRIOLA, Jousseaume, 1884.

Shell with strong smooth, spiral ridges and channels; last whorl flattened and angulated at the base. T. BAYANI, Jouss. Jousseaume makes *C. dextroversa*, Ads. and Reeve, the type of his group, but that species is already the type of *Seila*, A. Ad., a section of *Cerithiopsis*. The sculpture of the two groups is the same, but one is dextral, the other sinistral; I prefer to limit *Viriola* to the sinistral shells.

Section SYCHAR, Hinds, 1844.

Elongated, with rounded whorls. T. VITREA, Hinds.

Genus CERITHIUM, Adanson, 1757.

Subgenus CERITHIUM (sensu stricto).

C. NODULOSUM, Brug. Pl, 19, figs. 13, 14; Pl. 20, fig. 15.

Ribs and tubercles crossed by spiral ridges and sulci, becoming coarser on the base; whitish or greyish, maculated and spotted with chestnut and chocolate color. Length, 3–4 in.

Singapore, Moluccas, Philippines.

It is *C. tuberosum*, Dillw., and *C. aluco*, Born (not Linn.).

C. ERYTHRÆONENSE, Lam. Pl, 20, fig. 16.

Shell smaller than *C. nodulosum*, with similar but neater sculpture; greyish with numerous small chestnut spots more or less confluent into longitudinal streaks. Length 2·5–3 in.

Red Sea.

I suspect that this will prove a synonym or at least only a variety of *C. nodulosum*. The synonyms are *C. striatum*, Schrœter, and *C. tuberosum*, of Reeve and Sowerby. The latter name being preoccupied by Grateloup for a fossil species, Bayle has changed it to *C. omissum*.

C. COLUMNA, Sowb. Pl. 20, figs. 17–20.

Shell with usually alternate larger and smaller spiral ridges, the larger ones more or less tuberculate, and both crossing somewhat distant pinched up longitudinal ribs; greyish, between the ribs with chestnut or chocolate dots and lines more or less confluent, interior sometimes white, sometimes chocolate-lined on the spiral ridges. Length, 1–1·5 in.

Mauritius, Philippines—Central Polynesia.

It is *C. echinatum*, Kiener, *C. Menkei*, Desh. (fig. 19), from *I. of Bourbon.*

Var. SCABRIDUM, Reeve (not Phil.). Fig, 20.

Smaller, striæ scabrous, canal shorter and more open.

Red Sea.

C. CITRINUM, Sowb. Pl. 20, figs. 21–23.

Solid, spirally striated, with distant, large, rounded longitudinal plaits, last whorl with a single varix, rounded below, canal long and curved; whitish, clouded with citron color. Length, 1·5 in.

Philippines.

I think that *C. siphonatum*, Sowb. (fig. 23), will prove synonymous; *C. bicolor*, Hombr. et Jacq. (fig. 22), also appears to be identical, or at least only a variety; finally the whole are probably mere varieties of *C. columna.*

C. SUTURALE, Phil. Pl. 20, fig. 24.

Longitudinally nodulosely ribbed, crossed by spiral lines, outer lip crenulated; whitish, with a chocolate sutural band. Length, 1 in.

Philippines.

C. ECHINATUM, Lam. Pl. 20, figs. 25–27.

Covered by revolving riblets, some of them bearing strong, pointed series of nodules, others alternately larger and smaller and unarmed,

usually five rows of nodules on the body whorl, outer lip fimbriated; white, with scattered or close chestnut dots or lines.
Length, 1·5–2·5 in.

Society and Paumotus Is.

C. mutatum, Sowb.. is a synonym, and *C. Adansonii*, Reeve (fig. 27), not Brug. = C. tuberculiferum, Pease, is a narrow form, scarcely entitled to varietal designation. *C. album*, Hombr. et Jacq. (fig. 26), is a form with the tubercles only slightly developed; occasionally the face of the body whorl is almost devoid of them.

C. Ruppellii, Phil. Pl. 20, figs. 28, 29.

Much narrower than the preceding species, the whorls somewhat shouldered, the tubercles small and rounded; whitish, spotted and marbled with chestnut. Length, 1·75 in.

Red Sea.

Reeve's figure (fig. 28) is somewhat abnormal. *C. Savignyi*, Fischer (fig. 29), and *C. alucoides*, Brocchi, are synonyms. This is *C. scabridum*, Philippi, but not of Reeve.

C. Adenense, Sowerby. Pl. 20, fig. 30.

Shell narrow, longitudinally distantly ribbed, with spiral riblets, two of which bear tubercles on crossing the ribs, tumid and tuberculated at the suture, then excavated; white, sparingly marbled with chestnut. Length, 22 mill.

Aden.

This may be a young specimen of the preceding species.

C. armatum, Phil. Pl. 20, figs. 31, 32; Pl. 21, fig. 33.

Shell narrow, augur-shaped, the whorls with a series of large nodules next the suture, and three series of small papillæ beneath on the body whorl, a varix on the latter, and a few others near the apex; pale yellowish brown, spotted with chocolate.
Length, 1·25 in.

Philippines.

C. nigropunctatum, Sowb. (fig. 33), appears to me to be the juvenile of this species.

C. Novæ-Hollandiæ, A. Ad. Pl. 21, fig. 34.

Shell narrow, with flexuous longitudinal plaits, somewhat tumid near the suture, merging below on the last whorl, into three spiral series of tubercles; aperture crenulated within; whitish, variegated with chestnut on the lower half of each whorl. Length 1·5 in.

Australia.

C. FILOSUM, Sowb. Pl. 21, fig. 35.

Longitudinally plicate, with three spiral rows of rather large rounded tubercles, and an intermediate smaller row, interstices narrow; white, with chestnut lines between the ribs. Length, 22 mill.

Philippines.

C. CORALLINUM, Dufresne. Pl. 21, fig. 36; Pl. 24, fig. 46.

Shell with strong, rounded longitudinal ribs, crossed by spiral riblets and intermediate striæ, the intersections tuberculated, aperture crenulated within; chocolate brown. Length, 40 mill.

Philippines.

C. SCULPTUM, Pease. Pl. 21, fig. 37.

Shell spirally, nodulosely ridged, obsoletely longitudinally ribbed, regularly and evenly engraved throughout with close-set lines; whorls flatly convex; canal rather long and oblique; white, apex tinged with violet. Length, 1·25 in.

Paumotus Is.; Tahiti.

I am inclined to consider this identical with, and a synonym of *Vertagus torulosus*, Linn., but retain it here on account of some lingering doubts about it.

C. VULGATUM, Brug. Pl. 21, figs. 38–47.

Shell with distant, spiral, nodulose ribs, one row of nodules on each whorl more prominent, between the ribs are fine, close, engraved striæ; color variegated with grey, and chocolate or chestnut in undulating strigations and spots, interior similarly colored, the lips often tinged with orange brown. Length, 1–3 in.

Southern Europe, West Africa, Cape of Good Hope (Challenger Exped.).

The synonymy, including varietal names is enormous. I do not think the species varies more than is usual in the genus, and I am not disposed to recognize the so-called varieties as having any real claim to separation from the type; however, as they are admitted by some European naturalists of the "modern school" I figure a number of them.

Locard identifies this species with *Strombus tuberculatus*, Linn.; to this may be added, among other names *C. subnodosum*, Adams (fig. 39), from a worn and somewhat aberrant form, *C. Moluccanus*, Renieri, *C. alucoides*, Olivi, *C. Goumier*, Adanson, *C. neritaceus*, Renieri, *C. Milne-Edwardsii*, Calcara. *C. modosus*, Schröter, *C. aluco*, Marschlius, and the following "varieties":

Var. *nodulosa*, Phil., var. *provinciale* (sp.). Locard, var. *alucaster*, Brocchi (fig. 40), and var. *plicata*, Phil. (fig. 49), which is the same form, var. *subvulgatum* (sp.), Locard, and its synonym, *C. spinosa*, Blainv. (fig. 41), var. *Bourguignati* (sp.), Locard, and its synonyms, *C. tuberculata*, Phil., *C. alucaster*, Scacchi, and *C. intermedia* and *C. minima*, Weink., var. *Servaini* (sp.), Locard, var. *mutica*, Bucq. Dautz. et Dollf. (fig. 42), var. *angustissima*, Weink. = *C. stenodeum*, Locard, var. *protractum*, Bivona, and its synonym var. *gracilis*, Phil. (fig. 43), vars. *hirta*, *seminuda* (fig. 45) and *longissima* (fig. 44) of Bucq. Dautz. et Dollf., var. *inscriptum*, Monts, (for var. *repanda*. B. D. D., not Monts., fig. 46), var. *repanda*, Monts., vars. *albina*, *citrina* and *melania*, Monts., var. *minuta*, de Serres, var. *pulchella*, Phil. (fig. 47).

C. RUPESTRE, Risso. Pl. 21, figs. 48–50.

Shell spirally engraved, with subnodulous oblique longitudinal low riblets, stronger at the suture and fading out below; greyish, numerously spotted and striped wlth chestnut. Length, 1 in.

Mediterranean Sea.

Always smaller, smoother and less angulated than the preceding species; the painting has frequently a minutely tessellated appearance. The synonyms are *C. lividulum*, Risso, *C. fuscatum*, Costa, *C. Mediterraneum*, Desh., *C. tuberculatum*, Blainv., *C. variegatum*, Menke, *C. doliolum*, Weink., *C. verrucosum*, Renieri. As in the case of *C. vulgatum*, several species and varieties have been manufactured out of forms of this shell, such as var. *strumaticum* (sp.), Locard = *C. tuberculatum*, Blainv. = var. *plicata*, B. D. D. (fig. 49), var. *Massiliense* (sp.), Locard = var. *minor*, B. D. D. (fig. 50), and var. *attenuata*, B. D. D.

C. ADUSTUM, Kiener. Pl. 21, figs. 51, 52.

Whorls angulated and tuberculated above, with sometimes two or three inferior rows of small tubercles on the body whorl, closely spirally striate, the striæ sometimes granose; columella with a heavy posterior callus; whitish, obscurely clouded with grey, with more or less interrupted chestnut or chocolate spiral lines and maculations. Length, 1·5–2·25 in.

Gallapagos Is., Panama to Mazatlan.

The synonyms are *C. nebulosum*, Sowb. (fig. 51), *C. maculosum*, Kiener. In the typical *C. adustum* the tubercles are obsolete, so that the shell is nearly smooth.

C. CÆRULEUM, Sowb. Pl. 21, fig. 54.

Solid, ventricose, finely spirally striate, with several spiral rows of tubercles on the body whorl, the upper ones larger, and forming an angle or shoulder; ashy grey, maculated with chocolate. Length, 40 mill.

Red Sea, Indian Ocean.

C. GUINIACUM, Phil. Pl. 22, figs. 55, 56.

Lightly spirally striated, with large, distant, rounded, longitudinal plicæ, tumid near the suture, fading out on the body whorl; whitish, under a yellowish corneous epidermis. Length, 34 mill.

Gabon country, W. Africa (Philippi).

In Reeve's Iconica the habitat of this species is said, on the authority of Cuming, to be "Lord Hood's Island, coast of Guinea"!

C. SANDWICHENSE, Sowb. Pl. 22, fig. 58.

Whitish, spirally lirate, crossing strong, rounded longitudinal ribs; whorls 9, convex, suture margined. Length, 27 mill.

Sandwich Islands.

Described from a single, not fully matured specimen. Appears related to the preceding species.

C. AEMULUM, Sowb. Pl. 21, fig. 53.

Shell turreted, with distant pinched up plications, and revolving striæ, appearing as though tessellated; yellowish white, with concentric reddish or violaceous lines; Length, 45 mill.

Cape Verd Is.

The specimens obtained were fossilized but retained their color; and the shell is probably still living in the neighboring waters.

C. TESSELLATUM, Sowb. Pl. 22, fig. 59.

Shell minutely regularly tuberculated, whitish, with chestnut colored small tessellations, outer lip thick, crenulated. Length, 22 mill.

Darnley's Isl., N. Australia.

C. CIRCINATUM, A. Ad. Pl. 22, fig. 57.

Dark chocolate color, with filiform spiral, white grooves, rather nodose between the grooves, distantly longitudinally plicate. Length, 22 mill.

Isl. Mindanao, Philippines.

C. UNCINATUM, Gmel. Pl. 22, figs. 60, 61.

Shell with a superior row of pointed tubercles forming an angle on the whorls, and two series of small nodules below, on the body

whorl; white, mottled with chestnut and ornamented by punctured lines, the large tubercles black tipped. Length, 1 in.

West Indies (Mörch, Sowb., etc.); *West Coast of N. Amer.* (Carpenter, Adams, etc.).

This species I have not seen, but from the figure it appears to be very close to, perhaps a spinose variety of the West Indian *C. eburneum*, Brug. Mörch included it in his West Indian catalogue and refers it to the MS. name *C. Antillarum*, Dunker. On the other hand, Carpenter includes it among his Mazatlan shells and considers *C. famelicum*, Ad., an unfigured species from Panama, a synonym; he has described a var. *mediolæve*.

C. LITTERATUM, Born. Pl. 22, figs. 63, 64.

Shell with close granular, spiral striæ, narrowly shouldered by a row of tubercles; white, the interstices of the granules chestnut or chocolate spotted. Length, 1–1·5 in.

West Indies, Florida.

It is *C. angustum*, Anton.

C. MUSICUM, Sowb. Pl. 22, fig. 65.

Rudely plicate, forming a concave shoulder on each whorl; white, with music-like chocolate lines and spots. Length, 1 in.

Habitat unknown.

C. SEMIFERRUGINEUM, Lam. Pl. 22, figs. 66, 67.

Spirally, granosely striated, with a pair of stronger tuberculated riblets in the middle of the body whorl, and a still stronger subsutural row, extending to the spire whorls; yellowish white, irregularly maculated and spotted with orange, chestnut or chocolate color. Length, 1–1·5 in.

West Indies.

C. pictum, Wood (fig. 67), is a synonym.

C. ATRATUM, Born. Pl. 22, figs. 68–70.

Shell with a sutural row of small nodules, succeeded by a row of larger ones, and below it, on the body whorl, about four rows of slight granules, between each row several close incised spiral lines, body whorl with a varix opposite the aperture; greyish, more or less clouded with chocolate, often almost entirely covered by varying shades of the latter; when the shell is dark the aperture becomes violaceous-blue. Length, 1–1·5 in.

West Indies, Florida.

C. caudatum, Sowb. (figs. 69, 70), is a synonym; Mörch makes of it a var. *tenuis*. I think that the unfigured *C. Floridanum*, Mörch, may also be referred here.

C. EBURNEUM, Brug. Pl. 22, figs, 61, 71–75, 77–80.

Shell granose or tuberculated, one row of tubercles stronger, forming an angle on the middle of the spire whorls; between the tubercles are spiral fine striæ, finely spotted with chestnut or chocolate; sometimes the whole shell is pure white; there are generally occasional varices; interior of aperture marked like the exterior.

Length, 1 in.

Florida, West Indies.

The synonyms are *C. semiferrugineum* of Mörch (Yoldi Cat.) = var. *solida*, Mörch, *C. umbonatum*, Sowb. (fig. 62), *C. Novæ-Hiberniæ*, A. Ad. (figs. 73, 74), said, notwithstanding its name, to come from Florida, *C. fenestratum*, Sowb. (fig, 75), *C. graciliforme*, Sowb. (fig. 77), *C. pulicarium*, Phil. (fig. 77a), *C. striatissimum*, Sowb. (figs. 78, 79), and *? C. planispiratum*, Sowb. (fig. 80).

C. ALGICOLA, C. B. Adams. Pl. 22, figs. 82, 81.

Closely, longitudinally plicate, crossed by spiral striæ, forming small tubercles, whorls concavely shouldered; white, variegated with fulvous. Length, 20 mill.

West Indies.

I am not acquainted with this species. Mörch refers to it doubtfully, *C. punctulatum*, Gmel., *C. litteratum*, var. *parva*, of Kiener, and he adds vars. *vittata* and *tenuis*. *C. lentiginosum*, Sowb. (fig. 81), appears to be very like this species; it is described without locality.

C. MUNITUM, Sowb. Pl. 23, figs. 82–84.

Whorls flattened, varicose, with rude longitudinal plaits, crossed by spiral costulations, two spiral rows on the middle of the body whorl, strongly tuberculated; yellowish white, stained and lined with light chestnut. Length, 1 in.

Philippines, Viti Islands.

Reeve's locality "Mediterranean" and his reference to Philippi as authority are erroneous. With this species I unite as a synonym *C. pyramidatum*, Hombr. et Jacq. (fig. 84), a name preoccupied by Deshayes for a fossil species, and changed to *C. proditum* by Bayle, and which the latter author, having previously used this specific name in the same paper to designate another species, finally changed to *C. Audouini*.

C. SPATHULIFERUM, Sowb. Pl. 23, fig. 86.

With distant, longitudinal and spiral riblets the intersections forming two revolving rows of strong tubercles on the spire whorls, three on the body—one of which is above and two below the periphery, tubercles flattened; yellowish white or ash color.

Length. 1·25 in.

Hab. unknown.

Probably a variety of the preceding species.

C. OPPORTUNUM, Bayle. Pl. 23, fig. 85.

Shell distantly costate, so as to appear many-sided, crossed by somewhat distant spiral riblets, the body whorl with two larger ribs, on the periphery and below it; ashy gray, Length, 2 in.

N. Australia.

The name has been recently proposed instead of *C. polygonum*, Sowb., preoccupied by Leymerie for a fossil species.

C. DIALEUCUM, Phil. Pl. 23, figs. 88, 87.

Nodose, crossed by riblets and intermediate fine striæ; yellowish white or whitish, with narrow chestnut or chocolate bands between the revolving riblets. Length, 1 in.

Philippines.

C. striatum, Hombr. et Jacq. (fig. 87), is a synonym.

C. PRODITUM, Bayle. Pl. 23, fig. 89.

Longitudinally plicate, tuberculated by the crossing of spiral riblets, whorls angular in the middle, the last with two beaded riblets below; whitish, stained with chestnut between the plications.

Length, 1 in.

Philippines.

Described by Sowerby under the name of *C. fusiforme*, a name preoccupied by Leymerie for a fossil species.

C. ROSTRATUM, Sowb. Pl. 23, figs. 90, 91.

Graceful, thin, white, longitudinally plicate and finely granosely ribbed, often minutely chestnut dotted between the granules; canal produced, usually stained with chocolate, Length, 15–22 mill.

Philippines, Viti and Sandwich Islands.

C. gracilis, Pease, is a synonym.

C. LISSUM, Watson. Pl. 23, fig. 92.

Longitudinally rather closely ribbed, cut and somewhat tuberculated by spiral striæ; brownish white, with a white varix on the body whorl. Length, 1 in.

Fiji Is.

C. CUSTOS, Bayle. Pl. 23, figs. 95, 96.

Turreted, whorls strongly, tubercularly shouldered, elsewhere granular, varicose; orange-brown, whitish on the tubercles.

Length, 23 mill.

Philippines.

Described by Sowerby as *C. coronatum*, a name preoccupied by Bruguiere for a fossil species. I have a suspicion that this will prove a denuded state of the next species.

C. PLANUM, Phil. Pl. 23, figs. 98, 99, 97.

Narrow, flat whorled, subcylindrical, distantly, rather indistinctly longitudinally plaited, last whorl crenulately ribbed on the periphery and somewhat concave below, canal produced; white, with a single band of chestnut on each whorl. Length, 15 mill.

Philippines, Viti Islands.

C. invaginatum, Gould (fig. 97), from the last named locality, is a synonym.

C. SALEBROSUM, Sowb. Pl. 23, figs. 100, 1.

Slightly, tuberculately shouldered, with a pair of granulated revolving riblets on the lower part of the body whorl, ribbed, crossed by spiral lines; yellowish brown. more or less tinged with chestnut between the ribs. Length, 1 in.

Lord Hood's Island.

I am almost certain that this is simply a more flourishing state of *C. custos*, and consequently identical with *C. planum*.

C. BALTEATUM, Phil. Pl. 23, figs. 2, 3.

Varicose and longitudinally ribbed, tuberculated, swelled above, narrowed near the suture, last whorl with two strong tuberculated ribs below the periphery, and contracted below them; whitish, with a narrow, central, orange brown band, or brownish with a central white band. Length, 23 mill.

Philippines.

This may be another state of *C. planum*, Phil.; it is at least very closely related to it.

C. RUBUS, Martyn. Pl. 23, figs. 4–9, 15.

Varicose, brownish or brownish white, the whorls longitudinally plicate and spirally striate, with three spiral rows of tubercles on the spire whorls and about seven rows on the body. Length, 1 in.

Ceylon; Singapore; Philippines.

C. serratum, Wood, *C. mitræforme*, Sowb. (figs. 5, 6), which varies in having a white sutural band, *C. eximium*, Sowb. (figs. 7, 8), *C. granosum*, Kiener (fig. 9), and *C. sordidulum*, Gould (fig. 15), are synonyms.

C. TENELLUM, Sowb. Pl. 23, figs. 10, 11.

Thin, nearly transparent, white or rose color, sometimes with rows of small chestnut spots, varices white, whorls with excavated shoulder, tuberculated more strongly at the suture and shoulder angle than elsewhere, canal short and open, outer lip single. Length, 21 mill.

Philippines.

C. MUSCARUM, Say. Pl. 23, figs. 12, 13.

Whorls convex, crossed by rounded ribs, with wider interspaces, spirally lirate, forming granules on the ribs, fine striæ between the liræ; whitish, chestnut colored or chocolate, with series of minute chestnut punctations, sometimes on the ribs, sometimes between them. Length, 20 mill.

Florida; Bahamas.

It is *C. notatum*, Menke.

C. OCELLATUM, Brug. Pl. 24, fig. 19.

Blackish, spirally punctate with white, under a thin, olivaceous epidermis, whorls slopingly concavely shouldered, with a single row of tubercles at the angle. Length, 1·5 in.

Gallapagos Is. to Mazatlan, Muscat, Madagascar.

The Pacific and West American localities furnish this shell numerously, but specimens are in the British Museum, from Madagascar, and in the Phila. Academy are others from Muscat, collected by Dr. Ruschenberger, U. S. N. *C. irroratum*, Gould, and *C. stercus-muscarum*, Val., are synonyms.

C. INFLATUM, Quoy. Pl. 23, figs. 16–18; Pl. 24, fig. 23.

Chocolate color, under a yellowish olivaceous epidermis, usually shouldered, varicose, and roughly longitudinally plicate, tuberculated by the intersection of spiral riblets, with intervening spiral engraved lines. Length, 22 mill.

Philippines.

C. Billehcusti, Petit (fig. 18), is probably, and *C. breviculum*, Sowb. (fig. 18), is almost certainly a synonym; *C. Metcalfei*, Sowb. (fig. 23), can be added to the list.

C. CARBONARIUM, Phil. Pl. 24, figs. 34, 24.

Thick, dark chocolate, sometimes yellowish banded below the middle, whorls with two spiral rows of large blackish tubercles, with five additional rows, of smaller size on the body whorl, interstices finely spirally engraved. Length, 1–1·25 in.

Japan, China, Philippines, Seychelles, etc.

This is *C. tuberculatum*, Born. (not Linn.) = *C. Bornii*, Sowb. (fig. 24), and *C. Tourannense*, Eyd. et Soul. Reeve's figure of *C. carbonarium* represents a *C. morus*.

C. PATULUM, Sowb. Pl. 24, figs. 20–22.

Irregularly varicose, covered by a strong brownish epidermis; longitudinally strongly plicate, encircled by two strong tuberculated ribs, with other smaller ones, and intermediate liræ on the body whorl, body whorl distorted, narrowed into a distinct channel below, lip lirate within. Length, 1 in.

Philippines, Viti Is.

C. gibberulum, Frauenf., and, I think, *C. pellucidum*, Hombr. et Jacq. (fig. 22), are synonyms.

C. TUBERCULATUM, Linn. Pl. 24, figs. 25–28.

Varicose, with irregular large tuberculated ribs, and revolving rows of granules, with fine engraved lines between them; whitish, greyish, or yellowish, the granules and tubercles tipped with chocolate, so that the surface appears as though encrusted with gems.

Length, 1 in.

Polynesia.

This species, though varying considerably, may be distinguished from all its allies by usually possessing a strong oblique varix on the back of the body whorl. It is more usually known under the name of *C. petrosum*, Wood. *C. Janelli*, Hombr. et Jacq., is another synonym.

Var. PUPA, Sowb. Fig. 28.

Whitish or light lilac, with a fulvous band at the suture, and another below the middle of the body whorl.

Philippines.

C. MORUS, Lam. Pl. 24, figs. 32, 33, 29–31, 35–37, 39, 40, 41, 43, 45, 47; Pl. 25, figs. 55, 57, 58, 65, 66.

Dark chocolate color, with a varix on the body whorl opposite the aperture, spire with three, body whorl with about seven rows of small black tubercles, with a single stria between each.

Length, 1 in.

Red Sea, Madagascar, Philippines, Australia, Viti Is., etc.

C. concisum, Hombr. et Jacq., *C. obscurum*, and *C. gemmulatum* (figs. 57, 58), of the same authors, *C. carbonarium*, Sowb., not Phil., *C. breve*, Quoy, and *C. moniliferum*, Dufresne (fig. 35), are synonyms.

Var. VARIEGATUM, Quoy. Figs. 41, 43, 45, 65, 66.

E. A. Smith, in the Mollusca of the Alert Expedition, refers *C. variegatum*, Quoy, to the preceding species; judging from the original figure, and a large series of specimens evidently identical with it, none of them having the varix on the back, I believe that it is a small variety of *C. morus*, averaging 15 mill. in length, tessellated or irregularly variegated with dark brown on the tubercles, the aperture often violaceous. As to the *C. variegatum* figured in Reeve's Iconica (figs. 29–31), that appears to represent variations of *C. morus* depending on the slight development of tubercles and lighter, blotched coloring, but is much closer to the type than Quoy's species.

C. humile, Dunker (fig. 66), *C. nivosum*, Sowb. (fig. 45), *C. gemma*, Sowb. (fig. 41), *C. Californiæ*, Sowb. (fig. 43), and *C. acutum*, Hombr. et Jacq. (fig. 65), are probably synonyms.

Var. PATIENS, Bayle. Figs. 36, 37, 47.

The longitudinal ribs more developed, making the tubercles larger and more irregular in development; yellowish white or greyish irregularly blotched and spotted with chocolate, sometimes chocolate color with whitish markings.

Polynesia.

A much rougher shell than the typical *C. morus*, the tubercles larger and the intermediate spiral striæ faint or obsolete. Usually recognized as a species, under the name of *C. rugosum*, Wood, which is preoccupied by Lamarck for a fossil species. The characters appear to merge gradually into those of the type. *C. tuberculatum*, of Reeve's Iconica, is a synonym, and *C. musivum*, Hombr. et Jacq. (fig. 47), is a small form of it.

Var. BIFASCIATUM, Sowb. Figs. 39, 40, 55.

White, with a chestnut band on the spire, and two bands on the body whorl.

Philippines.

Probably *C. vittatum*, Sowb. (fig. 55), changed by Bayle to *C. Uranus*, because of the fossil *C. vittatum*, Lam., is a depauperate young shell of this form. I add *C. nigrofasciatum*, Sowb. (fig. 40).

C. LEMNISCATUM, Quoy. Pl. 24, fig. 38.

Varicose, roughly granulated in revolving series, with usually single intermediate liræ, in the middle of each whorl a few of the granules are larger, more like tubercles; whitish, more or less speckled or clouded with chocolate, frequently with a chocolate band on the spire, and two bands on the body whorl. Length, 1·25 in.

Philippines, Viti Islands.

C. TRAILLII, Sowb. Pl. 25, figs. 47–54, 56, 59.

Varicose, with spiral beaded striæ alternating with smaller plain ones; yellowish white, or clouded with chestnut or chocolate, the beads chestnut or chocolate color. Length, 1·5 in.

Singapore; Java; Philippines.

Differs from the preceding species in its finer, more regular spiral sculpture, variegated coloring, and absence of tubercles: it is possibly only a variety of it. *C. nitidum*, Sowb. (fig. 54) = *gentile*, Bayle, and *? C. baccatum*, Hombr. et Jacq. (fig. 59), are synonyms.

Var. LUCTUOSUM, Hombr. et Jacq. Fig. 56.

Stouter and smoother, the granules more distant and fewer; nearly uniform white, the granules milk-white.

Var. ALTERNATUM, Sowb. Figs. 48–50.

The granules larger, spiny, shell white, or chocolate color, or white with interstitial bands of chocolate.

Philippines.

C. robustum, Sowb. (fig. 50), is a synonym.

Var. SPLENDENS, Sowb. Figs. 53, 51, 52.

Granules larger, spiny, one or more series more developed, so that the whorls apppear subangulate and the lip margin crenulated; whitish to chocolate color, on the lighter colored specimens the spines are chestnut colored.

Philippines.

C. purpurascens, Sowb. (figs. 51, 52), is a synonym.

C. HANLEYI, Sowb. Pl. 24, fig. 42.

Shell with rounded longitudinal plications, varicose, slightly noduled by spiral sculpture; yellowish brown, with regular chestnut or chocolate spiral lines. Length, 22 mill.

Hab. unknown.

C. rubrolineatum, Sowb. (figured), is precisely like *Hanleyi*,—which was first described of the two on the same page of the Thesaurus. Why Sowerby abandoned the latter name in favor of the former, I cannot imagine.

C. MILLEPUNCTATUM, Hombr. et Jacq. Pl. 25, fig. 60.

Varicose, with alternate spiral rows of faint nodules and intermediate striæ; whitish, with chestnut spots. Length, 22 mill.

Ins. Hogoleu.

I know nothing of this species, which it appears had become lost to the scientific world.

C. ASPERULUM, Tryon. Pl. 25, fig. 62.

Brown, slightly shouldered, longitudinally plicate, with spiral lines of chestnut colored nodules and minute intermediate striæ, nodules sharp, outer lip thickened crenulated. Length, 14 mill.

Sandwich Islands.

Mr. Pease called this species *C. asperum*, a name preoccupied in the Vertagus group.

C. ELUDENS, Bayle. Pl. 25, fig. 63.

Whorls angulated, ventricose, plaited at the angle, girt beneath the suture with a tuberculated line, body whorl biangulate, both angles tuberculated; fulvous, chestnut spotted between the tubercles. Length, 15 mill.

Tasmania.

Described by Sowerby as *C. dubium*, preoccupied by the Sowerby of the "Mineral Conchology."

C. USTUM, Hombr. et Jacq. Pl. 25, fig. 61.

Narrow, decussated by longitudinal and spiral sculpture, the former more prominent, aperture striate within, ribbed without, brownish. Length, 28 mill.

Solomon's Archipelago.

C. NIGROBALTEATUM, E. A. Smith. Pl. 25, fig. 64.

White, chocolate banded above the suture, and on the periphery of the last whorl; whorls 12, convex, strongly longitudinally ribbed and spirally ridged and sulcated. Length, 15 mill.

Prince of Wales' Channel.

C. TORRESI, E. A. Smith. Pl. 23, fig. 14.

Whitish, with spiral series of chocolate colored spots upon the liræ between the longitudinal granose ribs; whorls 11, very slightly convex; aperture with external varix and interior grooves. Length, 14·5 mill.

Prince of Wales' Channel, Torres Straits, Australia.

Resembles *C. muscarum*, Say, of the Southern United States' Coast.

C. Kobelti, Dunker. Pl. 25, fig. 67.

Yellowish brown, varicose, roughly nodulous, with decussating sculpture; whorls 8–9, convex, with deep suture; lip thickened, grooved within. Diam. 23 mill.

Japan.

C. Isselii, Pagenstecher. Pl. 25, fig. 68.

Whorls 8, convex, decussated by close, fine longitudinal and spiral sculpture, brownish. Length, 22 mill.

Red Sea.

Unknown to me.

C. egenum, Gould. Pl. 25, fig. 70.

Whitish, with small brownish dots at the base; whorls about 10, nearly flat, spirally threaded, last whorl somewhat swollen, varicose. Length, 9 mill.

Wilson's Isl.

Reeve's figure does not represent this species.

C. ianthinum, Gould. Pl. 25, figs. 71, 72.

Light, violaceous, the suture, lip and varices white, with close, spiral, thread-like, somewhat granose striæ. Length, 9 mill.

Clermont Tonnere; Ins. Bourbon.

C. aspersum, Desh. (fig. 72), from the last-named locality, is a synonym.

C. Maillardi, Crosse. Pl. 25, figs. 73, 74.

Greyish white, with small interrupted dark spiral lines, whorls 11, convex, quadrisulcate and granular, with frequent varices. Length, 8 mill.

Ins. Bourbon.

I doubt whether this is distinct from the last species. It was first described by Deshayes as *C. Crossei*, a name preoccupied by Tiberi.

C. maculosum, Mighels. Pl. 26, figs. 75, 76.

Club-shaped, with spiral striæ, and longitudinal wrinkles on the upper part of the whorls, which are a little concavely shouldered; shining white, irregularly blotched and spotted with chestnut or chocolate, sometimes covering most of the surface, at other times faint, and sparse. Length, 9 mill.

Sandwich and Viti Is.; Mauritius.

C. Nassoides, Sowb. (fig. 76), is a synonym.

C. DIMINUTIVUM, Phil. Pl. 26, fig. 77.

Turreted, with obsolete rounded longitudinal ribs, and fine spiral striæ, developing a line of tubercles on the shoulder angle; whitish, orange brown between the sculpture. Length, 7 mill.

Friendly Is.; Paumotus.

C. ZEBRUM, Kiener. Pl. 26, figs. 78–82.

Minutely, regularly granulated by fine decussating sculpture, white or fulvous, chocolate or chestnut banded at the suture and periphery, occasionally varicose. Length, 8 mill.

Gallapagos Is.; Samoan Is.

C. delectum, Sowb. (figs. 80–82), is a synonym; the whorls are sometimes rosy or dark, with minute spiral series of black specks.

C. ICARUS, Bayle. Pl. 26, figs. 83, 84.

Longitudinally plaited, spirally closely ridged, white, maculated with brown, often dark banded at the suture, and on the periphery of the last whorl, outer lip crenulated within. Length, 6·5 mill.

Loochoo and Bonin Is.

Described by Sowerby as *C. tenue*, preoccupied by Deshayes for a fossil species.

C. INTERSTRIATUM, Sowb. Pl. 26, fig. 85.

Granosely costulate, crossed by close spiral lines, whitish, with chestnut colored spots in spiral series. Length, 13 mill.

Hab. unknown.

C. UNILINEATUM, Pease. Pl. 26, fig. 86.

Slightly longitudinally ribbed, spirally striated, rather frequently varicose, whitish or yellowish, sprinkled with pale chestnut spots, with a sutural chestnut band. Length, 6 mill.

Sandwich Is.

C. FUCATUM, Pease. Pl. 26, fig. 87.

Pale fawn color, encircled by three series of nodules, between them spotted with chestnut, suture excavated, whorls occasionally varicose. Length, 10 mill.

Sandwich Is.

C. PAXILLUM, Pease. Pl. 26, fig. 88.

Brownish, longitudinally plaited, spirally tuberculated upon the plaits, and striated between the tubercles. Length, 6 mill.

Sandwich Is.

C. PLACIDUM, Gould. Pl. 26, fig. 89.

White, with rough spiral ridges and deep interstices, whorls flat, suture excavated. Length, 6 mill.

China Seas.

C. RARIMACULATUM, Sowb. Pl. 26, fig. 91.

Turreted, shouldered, spirally striated, the shoulder-angle tuberculated; white, with a few chestnut spots irregularly disposed.

Length, 10·5 mill.

Ins. Zebu, Philippines.

C. REPLETULUM, Bayle. Pl. 27, fig. 92.

Short, ventricose, grey tending to black, banded with dark spots and interrupted lines, whorls plaited above, aperture lirate and dark banded within. Length, 22 mill.

Ins. Bohol, Philippines.

Described by Sowerby as *C. obesum*—preoccupied by Deshayes for a fossil species.

C. OBESULUM, Sowb. Pl. 26, fig. 93.

Solid, blackish, slightly angularly elevated on the back of the whorls, with spiral series of beaded ribs, aperture whitish, lip crenated within. Length, 11 mill.

Hab. unknown.

C. FLAMMICULATUM, Sowb. Pl. 26, fig. 98.

Greyish, with chocolate between the spiral series of small nodules or grains. Length, 15 mill.

Hab. unknown.

C. ADUNCUM, Gould. Pl. 26, figs. 96, 97.

Solid, distorted, with a stout varix on the body whorl, rather smooth, with thin, thread-like spiral striæ; whorls 9, flattened, suture scarcely impressed; yellowish ash-color, tinged with brownish.

Length, 1 in.

Philippines.

C. dorsuosum, A. Ad. (fig. 97), is a synonym.

C. ALBOLIRATUM, Carp. Pl. 26, fig. 90.

Obsoletely ribbed, spirally lirate, one or two of the liræ more prominent, forming an angle on the whorls, whitish.

Length, 1–3 mill.

Mazatlan.

A very young species, probably a juvenile of some other species of our Pacific coast.

C. TROCHIFORME, Sowb. Pl. 26, fig. 95.

Trochiform, longitudinally plaited, tuberculated by the crossing of spiral sculpture, last whorl rather flat below, and less sculptured; chocolate color. Length, 3 mill.

California.

A juvenile, which I am unable to refer definitely to any form known to me. The locality needs confirmation.

C. FERRUGINEUM, Say. Pl. 26, figs. 99–5.

Orange-red to chocolate color, sometimes whitish on the lower half of the body whorl, sometimes variegated, with small, oblique, rounded ribs, cut into numerous tubercles by spiral grooves, lower half of body whorl less distinctly tuberculated, whorls occasionally varicose. Length, 12–15 mill.

So. Carolina to Florida; West Indies.

Var. VERSICOLOR, C. B. Adams. Figs. 100–5.

The West Indian examples of *C. ferrugineum* have received this name: they usually vary from the type in being parti-colored as above, and a little stouter in form. These differences are not very constant, *C. Eriense*, Val. (fig. 1), of which the figures in Reeve and Sowerby (copied by me) appear to be magnified representations, and which Mörch calls var. *major*, may be here referred, as well as *C. stercus-muscarum*, Kiener, *C. variabile*, C. B. Ads. (fig. 2) = var. *grisea*, Mörch, *C. nigrum*, Phil., *C. Bermudæ*, Sowb. (fig. 4), *C. Thomasiæ*, Sowb., *C. lutosum*, Menke (fig. 5).

C. RISSOIDÆ, Sowb. Pl. 26, fig. 6.

Small, whitish, spirally striated, longitudinally plaited, with small tubercles in three rows on the spire whorls, suture deep, last whorl alternately ridged beneath. Length, 7 mill.

Ins. St. Thomas, W. I.

A much smaller species than the foregoing, always white, or yellowish white.

C. SAGRÆ, d'Orb. Pl. 26, fig. 94.

Ovately ventricose, beaded in three spiral series on the upper whorls, more numerously on the lower one, the row immediately below the suture more prominent; whitish, longitudinally irregularly stained with chestnut. Length, 9 mill.

Cuba.

C. megasoma, C. B. Ad., is a synonym. Mörch mentions a var. *pallida*.

C. MUTABILE, C. B. Adams. Pl. 26, fig. 7.

Whorls convex, with a narrow shoulder under the suture, sculpture very faint, showing under the glass minute granulations and striæ, spirally disposed; white, variegated and blotched with chestnut, sometimes wholly chestnut; aperture large, the outer lip well rounded, thin. Length, 9 mill.

Salt Lakes, Bahamas.

C. CRASSILABRUM, Krauss. Pl. 27, fig. 17a.

Whitish, spotted and dotted with chestnut, ribbed, angulated above the middle of the whorls, with beaded spiral striæ; outer lip slightly expanded, crenulated, spotted. Length, 12 mill.

Cape of Good Hope.

C. SEROTINUM, A. Ad. Pl. 27, figs. 19, 20.

Whitish or pale brownish, longitudinally closely plicated, spirally striated, whorls ventricose in the middle, body whorl truncate below, canal contracted, short, columellar lip free.

Length, 12–18 mill.

Van Dieman's Land

C. rhodostoma, A. Ad. (fig. 20), is a synonym.

C. PAUXILLUM, A. Ad. Pl. 34, fig. 95.

Subcylindrical, pale fulvous, longitudinally plaited and spirally ribbed, the intersections nodulous, suture deep. Length, 9 mill.

Philippines.

Section COLINA, H. and A. Adams, 1853.

C. PINGUE, A. Ad. Pl. 26, figs. 8, 9, 11.

Finely, spirally striated, whorls tuberculated above the suture, body whorl plicate above; yellowish chestnut color, interior lined with chestnut. Length, 18 mill.

Cape of Good Hope.

Varies considerably in outline: *C. contractum*, Sowb. = *C. crumena*, Bayle (fig. 9), and *C. tæniatum*, Sowb. (fig. 11), being synonyms.

C. CYLINDRACEUM, Pease. Pl. 26, fig. 12.

White, with pinched-up, curved longitudinal distant ribs, and more numerous sutural crenulations, and minute, distant, bead-like spiral striæ, closer at the suture. Length, 23 mill.

Paumotus Is.; Viti Is.

C. MACROSTOMA, Hinds. Pl. 26, figs. 13–15, 10.

Pale fulvous, or whitish, thin, spirally striated, longitudinally ribbed, spire whorls more or less angulated in the middle, ribs less distinct on the body whorl, outer lip thickened. Length, 12 mill.

Borneo.

I unite with this species *C. costatum*, A. Ad. (fig. 13) = *C. costiferum*, A. Ad. = *C. rigens*, Bayle, *C. pupæforme*, A. Ad. (fig. 15), which, according to the form of the aperture, and sharp lip is not adult, and *C. pygmæa*, H. Ad. (fig, 10), the latter a more highly colored specimen.

C. BRAZIERI, Tryon. Pl. 26, fig. 16.

Subcylindrical, fragile, white, whorls angulated and tuberculated on the middle, finely spirally striate, longitudinally faintly costate, aperture prolonged below into a straight, sharp canal.

Length, 1 in.

Australia.

An aberrant form, almost deserving to be made the type of a new group. The extreme fragility and form of the mouth indicate juvenility. Mr. Brazier sent us several specimens, which all exhibit the above characters.

C. GRACILE, H. Adams (unfigured). *Eastern Seas.*

Mr. Adams says that this species was subsequently described by Mr. Sowerby under the name of *C. coarctata;* I have not found this latter description.

Section LIOCERITHIUM, Tryon, 1887.

C. INCISUM, Sowb. Pl. 27, fig. 22.

Shell with spiral incised grooves, whitish or grey, marbled with chocolate, sometimes articulated at the suture, interior white, grooved with chestnut. Length, 1 in.

L. California; Guaymas, Mex.

The localities Australia and Philippines, of the monographers, are incorrect.

C. CURTUM, Sowb. Pl. 27, fig. 23.

Shell similarly sculptured and colored as the preceding, but shorter and stouter. Length, 18 mill.

Cerros Is., L. California.

This may be a variety of the preceding species, but I have not seen intermediates. Bayle has changed the name to *C. Euros*, on account of *C. curtum*, H. C. Lea.

C. INTERRUPTUM, Menke. Pl. 27, figs. 24, 25.

Form of the preceding species but more finely irregularly grooved, with intervening ridges; whitish, marbled or closely spirally lined with chocolate. Length, 12–15 mill.

Cape St. Lucas, L. Cal. to Panama; Gallapagos Is.

C. sculptum, Sowb. (fig. 24), is a synonym.

Var. GALLAPAGINIS, A. Ad. Fig. 25.

The spiral grooves crossed by slight, close longitudinal riblets, forming a somewhat beaded surface.

Guacomayo; Gallapagos.

C. NITIDUM, Hombr. et Jacq. Pl. 27, fig. 31 (lower).

Vitreous white, channeled, with a line of tubercles next below the suture, which are sometimes yellowish. Length, 1 in.

Mangareva Is.

C. BÆTICUM, Pease. Pl. 27, fig. 26.

Thin, with alternate shallow grooves and ridges, the former yellowish, the latter chestnut colored; these colors also appear in the aperture; the upper whorls are obscurely ribbed and nodulous.

Length, 6 mill.

Sandwich Is.

C. LINEATUM, Dunker. Pl. 27, figs. 27, 28.

Granulated by revolving ribs and intermediate grooves, and less prominent longitudinal sculpture; white, with two close, interrupted chestnut lines on the middle of each whorl. Length, 5 mill.

Viti Is.

C. MONACHUS, Crosse and Fischer. Pl. 27, fig. 21.

Rather thin, subtranslucent, reddish yellow, covered with minute chestnut markings; whorls 10, rounded, obtusely carinated, carina forming an articulated band, last whorl with two obtuse carinæ, spirally striated, occasionally varicose. Length, 18 mill.

Port Adelaide, Australia.

The authors consider the species a Cerithidea.

C. LACTEUM, Kiener. Pl. 27, figs. 29, 30, 33.

Spirally grooved, crenulated near the suture, or sometimes minutely granular; white, or yellowish white, sometimes with a row of subsutural chestnut spots, sometimes with obscure zigzag chestnut strigations. Length, 15 mill.

Sandwich and Viti Islands.

C. pusillum, Nuttall, is probably, and *C. papillosum*, Sowb. (fig. 33), is certainly a synonym.

C. PIPERITUM, Sowb. Pl. 27, figs. 31, 32.

Spirally ribbed and grooved, white, the ribs chestnut spotted, whorls angulated in the middle. Length, 18 mill.

Philippines; Polynesia.

C. punctatum, Brug., and *C. alveolus*, Hombr. et Jacq. (fig. 32), are synonyms.

Subgenus STILUS, Jeffreys, 1885.

C. INSIGNIS, Jeffreys. Pl. 26, fig. 17.

Rather thick, glossy, with numerous longitudinal ribs, crossed by three spiral striæ on each whorl, the intersections tubercular, periphery of body whorl ridged, base smooth and somewhat concave, white. Length, 6 mill.

Atlantic O. (Porcupine Exped.)

Unfigured and Undetermined Species of Cerithium.

The following are all described under the generic name of Cerithium, and are accordingly included here, although it is probable that some of them belong to other groups in the family.

C. STIGMOSUM, Gould. *Bonin Is.*

C. MINUTUM, Nuttall. *Sandwich Is*

C. ALABASTRUM, Mörch. *St. Thomas, W. I.*

C. RAWSONI, Krebs. Mörch. *Barbados, W. I.*

C. EPISCOPALE, C. ELONGATUM, C. FULVUM, C. FRAGILE, C. GRANULOSUM, C. GRACILE, C. IRREGULARE, C. MUREX, C. PAGODULA, C. PLATYNOTUM, C. PICTUM, C. RUBROPUNCTATUM, C. RUDE, C. CONICUM, C. CONULUS, C. VENTRICOSUM, C. TURRITELLA, all of Anton. *Local. unknown.*

C. SCABRICOSTA (*Loc. unknown*), C. TUBULUS (*Bass Sts.*), C. FUSCUM (*Navigator's Is.*), C. GIBBEROSUM (*Nicobar Is.*), all of Dunker.

C. DORSUOSUM, Menke. *Australia.*

C. VERSICOLOR and C. PUMILUM (*Hab. unknown*), C. GLABRATUM (*Australia*), C. FILOSUM (*California*), C. SPADICEUM (*Yucatan*), C. EXIGUUM (*Friendly Is.*), C. CECILLII and C. NEBULOSUM (*Loochoo Is.*), C. ANTARCTICUM and C. PULLUM (*Magellan's Sts.*), all of Philippi.

C. ABBREVIATUM (*N. Guinea*), C. BICANALIFERUM and C. MINIMUM (*N. Australia*), of Brazier.

C. GRACILENTUM and C. LACINIOSUM, Mighels. *Sandwich Is.*

C. VARIEGATUM, Folin. *Panama.*

C. CANCELLATUM, H. C, Lea. (Minute, perhaps not a Cerithium). *Delaware Bay.*

C. PROTEXTUM, Conrad. = *Terebra.*

C. GIGANTEUM, Lam. (Not Australian, but) Fossil. *Paris basin.*

C. DISLOCATUM, Say. = *Terebra.*

Subgenus VERTAGUS, Klein., 1753.

C. MACULOSUM, Martyn. Pl. 27, fig. 35.

White, marbled and longitudinally interruptedly marked with chestnut; earlier whorls longitudinally distantly ribbed. all the whorls with incised lines marking off alternately wider and narrower spiral interspaces, which, at the base, become rounded, rugose ribs. Length, 5 in.

Gallapagos Is.

C. marmoratum, Quoy, *C. marmoreum*, Kiener, *C. magnum*, Jay, and *C. clava*, Brug., are synonyms.

C. SOWERBYI, Kiener. Pl. 27, figs. 36, 37.

Upper whorls irregularly ribbed and spirally striate, lower ones smooth, with a faint or obsolete shoulder of tubercles on each whorl; yellowish white with quadrangular chestnut spots in spiral series, overlaid by irregular chocolate blotches. Length, 3·5 in.

Philippines; N. Australia.

The pattern of coloring varies to yellowish white, with close irregular longitudinal chocolate blotches, and no rows of spots, they coalescing into the blotches; in this state,it is *C. Cumingii*, A. Ad. (fig. 37). It is *C. clava* of Sowerby's "Genera."

C. ALUCO, Linn. Pl. 27, fig. 38.

Whorls slightly angled and distantly nodose-spinose below the suture, upper whorls spirally ridged and cancellated, lower ones with an occasional, low spiral rib, otherwise smooth; white, thickly speckled, blotched and strigated with chestnut or chocolate. Length, 2·5–3 in.

Philippines; Viti Isles.

Murex coronatus, Born, is a synonym.

C. OBELISCUS, Brug. Pl. 27, figs. 39, 40.

Whorls with tuberculated spiral ribs and intermediate granulated spiral striæ, the tubercles more prominent on a slight shoulder of each whorl; yellowish white, more or less thickly spotted and clouded with chestnut or chocolate; last whorl with an obtuse lateral varix. Length, 2–2·5 in.

East Indies, Polynesia, Mauritius.

It is *C. Sinensis*, Gmel. A smaller form, in which the sculpture is sharper has received the name of *C. cedo-nulli*, Sowb. (fig. 40).

C. CORDIGERUM, Bayle. Pl. 27, fig. 41.

Shell finely, closely, spirally striated, with a line of tubercles at the suture, and a second, less prominent series below it on the spire, two or three inferior distant riblets on the body-whorl; whitish or yellowish brown, the riblets of the body-whorl often articulated with chestnut. Length, 1·5 in.

Australia.

Notwithstanding the difference in the sculpture I suspect that this will prove to be a mere variety of *C. obeliscus*. It was described by Lamarck as *C. semigranosum*, but as that author previously used the same name for a different, fossil species, Bayle changed it as above.

C. PULCHER, A. Ad. Pl. 27, fig. 42.

Spirally striated, obsoletely longitudinally ribbed, with a row of nodules at the suture, and a varix on the last whorl; yellowish, with chocolate spots between the sutural nodules. Length, 2 in.

N. Australia.

C. GEMMATUM, Hinds. Pl. 28, figs. 44, 45; Pl. 27, fig. 43.

Spirally grooved, the interstices more or less tuberculated, a stronger band of tubercles next the suture, body whorl flattened in front, with a large lateral varix; yellowish white, marbled and spotted with chestnut or chocolate. Length, 1·5–2 in.

Mazatlan to Panama; Viti Islands; Australia; Indian Archipelago.

The West American localities are for the type, the others for *C. articulatum*, Ads. and Reeve (fig. 45), which I cannot separate even as a variety; *C. tenuisculptum*, Sowb. (fig. 43), is another synonym.

C. SEMINUDUM, Sowb. Pl. 28, fig. 46.

White, spirally grooved, whorls angulated above the middle, armed with three series of large, sharp tubercles, body-whorl without tubercles below. Length, 1·25 in.

New Caledonia.

C. TORULOSUM, Linn. Pl. 28, figs. 50, 52, 53.

Whitish, with noduliferous ribs, beaded and tumid at the suture, spirally ribbed, outer lip digitated. Length, 1·5 in.

Society Is.

It is *C. annulare*, Gmel., and *C. annulatum*, Mart.

C. RECURVUM, Sowerby. Pl. 28, fig. 47.

Spire whorls with three rows of granulations, seven rows on the body whorl; white, with chestnut spots between the nodules.

Length, 2 in.

Red Sea.

C. KOCHII, Phil. Pl. 28, figs. 48, 49.

Spire longitudinally ribbed, ribs cut into nodules by spiral incised lines forming alternately wider and narrower interspaces; the ribs are obsolete on the body whorl, which has a single sutural row of nodules; yellowish white more or less marbled or tinged with light brown, sometimes the incised lines are chestnut colored.

Length, 1·5 in.

E. coast of Africa.

C. GRANIFERUM, Pease. Pl. 28, fig. 51.

Yellowish white, suffused with pale brown, minutely brown-spotted between the granules; whorls with tuberculated ribs below the suture, then two distant, smaller spiral series of granules, interstices striated, body whorl rounded and granulated beneath.

Length, 1 in.

Sandwich Is.

C. RAVIDUM, Phil. Pl. 28, fig. 54.

Fulvous, irregularly varicose, longitudinally plicate and spirally striated, the ribs tuberculated, a stronger spiral series just below the suture; canal narrow, long, only slightly recurved. Length, 1 in.

Sandwich Is.

Reeve's Iconica gives two figures of *C. graniferum*, of which the first (fig. 6) represents this species.

C. TURRITUM, Sowb. Pl. 28, figs. 55, 56.

Distantly ribbed, the ribs cut into tubercles by three spiral riblets, between which are spiral striæ, suture excavated.

Philippines; Japan.

The last-named locality is for *Pfeifferi*, Dunker (fig. 56), a synonym.

C. ATTENUATUM, Phil. Pl. 28, fig. 57.

Whitish, more or less suffused with chestnut, or entirely chestnut color; whorls rather flat, with alternate large granulated and small smooth spiral riblets; outer lip crenated, canal long, narrow, oblique. Length, 2 in.

Philippines.

It is *C. longicaudatum*, Ads. and Reeve.

C. MATUKENSE, Watson. Pl. 28, fig. 58.

With close, rounded longitudinal ribs, granulated by distant spiral threads, three or four on a whorl, occasionally varicose; whitish, with glossy brown spiral lines, and speckled with milk white. Length, 1·5 in.

Viti Is.

Allied to the preceding species in form, but differs in sculpture.

C. PHOXUM, Watson. Pl. 28, fig. 59.

With 10 or 11 longitudinal riblets, gradually becoming less regular, and four or five spiral striæ, tuberculating the riblets as they cross the latter, the wider spiral interspaces have each two or three inferior striæ; besides these, the whole surface is covered with finely fretted microscopic spirals; waxy straw color, stained with brownish flesh color. Length, 17 mill.

Viti Is.

C. NOBILIS, Reeve. Pl. 28, fig. 60.

Solid, smooth, flat, tumid at the suture, upper whorls angular, ribbed, tuberculated by spiral sculpture, lower whorls with spiral elevated lines; yellowish white, with fulvous, waved, longitudinal strigations. Length, 5 in.

Philippines.

C. BITUBERCULATUM, Sowb. Pl. 28, fig. 61.

Whitish, whorls with a pair of largely tuberculated spiral ribs beneath the suture, and a smaller granulated rib above it, finely striated. Length, 45 mill.

Australia.

C. ASPER, Linn. Pl. 28, figs. 62, 63.

With numerous, pinched-up, obliquely longitudinal ribs and equal interspaces, asperated at the crossing of spiral ribs, the interspaces of the latter often bearing several incised spiral lines; white, or yellowish white, the spiral riblets sometimes chestnut colored.

Singapore, Mauritius, Madagascar, Friendly Is., etc.

It is *C. vibex*, Gmel., *C. granulatum*, Linn, *C. rugatum*, Mart., *C. lineatum*, Lam. (fig. 63).

C. FASCIATUM, Brug. Pl. 28, fig. 64; Pl. 29, figs. 65–67.

Smooth, longitudinally plicate at the suture, more or less spirally incised, upper part of spire nodosely ribbed; whitish, spirally lined, or interruptedly spotted or blotched with chestnut color.

Length, 2·25–3·5 in.

Indian Ocean, Philippines.

It is *C. procerum*, Kiener, *C. Martinianum*, Pfr. (fig. 67).

C. PHAROS. Hinds. Pl. 29, fig. 68.

Closely longitudinally plicate at the suture, spirally distantly incised, upper whorls granularly ribbed; whitish, frequently spirally lineated with chestnut. Length, 2–2·25 in.

Paumotus, Viti Is., Indian Ocean.

Narrower and smaller than *C. fasciatum*, with finer and sharper sutural sculpture, but possibly only a variety of that species. It is *C. subulatum* (Lam.), of Kiener.

C. VERTAGUS, Linn. Pl. 29, figs. 69, 70.

Ventricose, smooth, longitudinally plaited at the suture, with distant faint spiral incised striæ, upper whorls asperate; yellowish white, sometimes more or less stained with, or entirely chestnut color. Length, 2–2·5 in.

East Indies, Philippines.

V. vulgaris, Schum., is a synonym.

Var. TÆNIATUM, Quoy. Fig. 70.

Smoother, the sutural plaits obsolete; yellowish white, chestnut banded.

New Guinea.

Subgenus CAMPANILE, Bayle, 1884.

C. LÆVE, Quoy. Pl. 29, fig. 71.

White, ventricose, spirally striated, slightly tuberculated at the suture, last whorl roundly angulated and somewhat inflated beneath, columella twisted. Length, 6 in.

Australia.

The largest living species of the family.

Genus FASTIGIELLA, Reeve, 1848.

F. CABINATA, Reeve. Pl. 29, fig. 72.

White, with three strong spiral keels on the spire whorls and ten on the body whorl, the interstices and suture excavated.

Length, 1·75 in.

Hab. unknown.

F. SQUAMULOSA, Pease. = *Coralliophila.*
F. POULSENII, Mörch. (Unfigured.) *Eleuthera, Bahamas.*

Genus BITTIUM (Leach), Gray, 1847.

B. GEMMATUM, Watson. Pl. 29, figs. 73, 75, 85.

Longitudinally ribbed, spirally ridged, developing two spiral rows of rather large tubercles on the centre of each whorl, thin, translucent white. Length, 8 mill.

Atlantic Coast of Spain, Portugal; 27–994 fms.

Sometimes the sculpture is so faint as greatly to alter the appearance of the shell.

Jeffreys changed the name to *Watsoni* (figs. 75, 85) on account of *C. gemmatum*, Hinds; but the latter is not a Bittium.

B. LACTEUM, Phil. Pl. 29, figs. 74, 76, 77.

Whorls flattened, with three spiral rows of tubercles on each, body whorl with three inferior rows of less tuberculate ribs; white. Length, 8 mill.

Mediterranean Sea, Canary Is.

The synonyms include *B. niveum*, Bivona, *B. elegans*, Petit, *B. Algerianum*, Sowb. The following are slight variations from the typical form: var. *lutea*, B. D. D. (fig. 76), uniformly yellowish; var. *tessellata*, B. D. D., tessellated with chestnut between the granulations; var. *quadriseriata*, B. D. D. (fig. 77), with four rows of granules instead of three on the lower whorls.

B. RETICULATUM, Da Costa. Pl. 29, figs. 78–83.

Whorls convex, with four spiral ribs, crossed by longitudinal plications and occasional varices, the intersections scabrous or nodulous, base of body whorl with spiral sculpture only; uniform chestnut color. Length, 13–15 mill.

Europe, Canary Islands.

The synonymy includes *B. scabrum*, Olivi, *B. lima*, Brug., *B. Latreillei*, Payr., *B. granulosum*, Risso, *B. mamillatum*, Risso, *B. angustum*, Desh., *B. ferrugineum*, Midd., *B. vulgatissima*, Clark, *B. afrum*, Sandri, *B. acuminatum*, Pennant, *B. Danicum*, Beck, *B. elongatum*, Sowb., *B. spina*, Tiberi, *B. baccatum*, Costa, *B. granulatum*, Costa.

Bucquoy, Dautz. et Dollf. (Moll. Roussillon) enumerate the following varieties; which are however, scarcely entitled to varietal rank:

Var. SCABRA, Olivi.

Dark brown, granulations rounded, regular, three series on a whorl (= var. *rudis*, Bragnone).

Var. LATREILLEI, Payr. Fig. 80.

Sculpture finer, light brown, the granulations dark brown, varicose.

Var. *variegata*, Monts., is a synonym.

Var. PALUDOSA, B. D. D. Fig. 81.

Whorls convex, longitudinal sculpture more prominent. Brackish water. *B. melanosa*, Monts., probably belongs here.

Var. JADERTANUM, Brusina. Fig. 82.

Smaller, more lanceolate, whorls a little more convex.

Var. *minor*, Phil. = this form.

Var. EXIGUA, Monts. Fig. 83.

Much elongated, whorls subcarinated in the middle, aperture very small.

Var. BIFASCIATUM, B. D. D.

Spiral sculpture scarcely visible, appearing as though only longitudinally costate, light yellowish, with two chestnut bands.

Probably var. *Sueziensis*, Issel, from the Red Sea, does not differ materially.

Var. LACTESCENS, Jeffreys.

Uniform whitish. = *B. albina*, Monts.

B. AMBLYTERUM, Watson. Pl. 30, figs. 93, 95, 99.

With close, rounded longitudinal ribs terminating in a spiral row of tubercles at the top and another at the bottom of each whorl, base of body-whorl smooth, translucent white. Length, 6·5 mill.

Bay of Biscay to *N. W. Africa*, 681 to 1261 fms.; *Azores*, 450 fms.; *Pernambuco, Brazil*, 675 fms.

Watson thinks it probable that *Cerithiella Whiteavesii*, Verrill, will turn out to be the same species; *B. gracile*, Jeffreys (fig. 95), is a synonym; *B. mamillanum*, Watson (fig. 99), described from a single specimen, afterwards broken, from Pernambuco, is apparently another.

B. ABRUPTUM, Watson. Pl. 30, fig. 97.

Longitudinal ribs about a dozen, low and narrow, divided by flat broader furrows, crossed by four spiral threads, forming prominent tubercles, base of body whorl smooth; translucent white.

Length, 6 mill.

Fayal, Azores; 450–500 fms.

B. ENODE, Watson. Pl. 30, fig. 1.

Finely longitudinally ribbed, terminating in a spiral subnodulous thread at the suture, a little below this a raised spiral line forms a slight carina, a less distinct one forms the inferior termination of the ribs, base of body whorl concave, smooth; ivory white.

Length, 5 mill.

Off Pernambuco, Brazil; 675 fms.

B. VARIUM, Pfeiffer. Pl. 29, fig. 86.

Thin, diaphanous, greyish brown, unicolored or with chocolate cingulæ, longitudinally plicate, decussated by spiral striæ, the plications obsolete on lower part of the body-whorl—which is varicosely gibbous. Length, 5 mill.

West Indies.

It is *B. reticulatum*, Muhlf., and *B. gibberulum*, Ads.

B. PALLIDUM, Pfr. Pl. 29, fig. 87.

Somewhat solid, whitish or light corneous; whorls 9, slightly convex, longitudinally plicate and spirally minutely striate, the last varicose. Length, 6 mill.

Cuba, St. Thomas, W. I.

Larger and more robust than the preceding species, *B. columellare*, d'Orb., is a synonym.

B. NIGRUM, Totten. Pl. 29, figs. 88, 89.

Chocolate color, and conical-elongated when young, becoming lighter colored and less conical when adult, tuberculated by decussating sculpture, of which the spiral only persists on lower part of body-whorl. Length, 5 mill.

New England to Florida.

The synonyms are *B. reticulatum*, Totten, and *B. Sayi* (Menke), of Gould, etc.

B. iota, C. B. Ad. (fig. 89), is probably only the juvenile of this species.

B. FILOSUM, Gould. Pl. 29, fig. 90.

Whorls 8, planulate, each with four incised spiral lines, usually becoming obsolete on lower part of body whorl, suture excavated; corneous, varying to chocolate color, sometimes light colored with the incised lines chocolate, interior chestnut color. Length, 15 mill.

Sitka to Monterey, Cal.

B. ESURIENS, Carp. Pl. 30, fig, 16.

Like the preceding, of which according to Carpenter it is possibly a degraded variety, but much smaller. Length, 6·5 mill.

Vancouver's Isl. to San Pedro, Cal.

B. QUADRIFILATUM, Carp. Pl. 29, fig. 91.

Whorls slightly convex, with well-impressed suture, narrow, with close longitudinal ribs, crossed by four raised spiral threads, base of body whorl smooth, light ash color varying to chocolate, interior chestnut color. Length, 8 mill.

S. Pedro—S. Diego, Cal.

B. ASPERUM, Gabb. Pl. 30, fig. 7.

A stouter species than *B. quadrifilatum*, the whorls slopingly convex, forming an obtuse angle above the suture, sculpture similar, but stronger. Length, 10 mill.

Southern California.

Described as a fossil of the pleistocene of the same region, but has since been discovered recent. *B. rugatum*, Carp., is a synonym.

B. ATTENUATUM, Carp. Pl. 30, fig. 8.

With about 10 rather narrow, rounded whorls, with scarcely impressed suture, with longitudinal riblets, distinct only at the top of the whorls, where they are decussated by two spiral lines, the spiral sculpture also becoming fainter below, base of body whorl prolonged, with about six spiral striæ. Length, 10 mill.

California.

B. PERUVIANUM, d'Orb. Pl. 30, fig. 21.

Ventricose, whorls slightly convex, granulated by longitudinal rounded ribs and spiral striæ, chestnut color. Length, 7 mill.

Near Arica, Peru.

B. PIGRUM, Watson. Pl. 30, figs. 4, 2, 3, 11.

With about 21 flatly rounded longitudinal ribs, and subequal interspaces, with three fine spiral threads, forming rounded tubercles on the ribs, suture defined above by a raised thread, which terminates the sculpture on the body whorl, being smoother on the base; dead white. Length, 9·5 mill.

Tristan da Cunha Is.

I think *B. luscinæ* (fig. 2), *B. philomelæ* (fig. 3), and *B. œdonicum*, Watson (fig. 11), are merely young shells of the species; they are all from the same locality.

B. DELICATUM, Watson. Pl. 30, fig. 6.

With about seventeen longitudinal ribs, separated by equal grooves, abruptly terminating about half-way on the rounded body whorl, spiral sculpture minute and faint, most prominent near the suture; translucent, glossy white. Length, 3·3 mill.

Tristan da Cunha Is.

B. GEORGIANUM, Pfeiffer. Pl. 29, fig. 92.

Whorls with three strong spiral cingulæ completely dominating the distant longitudinal costulations; rather thin; yellowish white with a few minute irregular fulvous spots, under a light yellowish epidermis. Length, 5 mill.

South Georgia Isl.

B, TRICARINATUM, Pease. Pl. 30, fig. 9.

Whorls turreted, rounded, with three strong spiral keels, longitudinally plaited, suture well impressed, light yellowish brown. Length, 7·5 mill.

Sandwich Is.

B. TURRITELLIFORMIS, Angas. Pl. 30, fig. 13.

Rather thin, finely spirally ridged, interstices very minutely longitudinally striated; whorls 10, the last keeled below, with smooth, somewhat concave base; light yellowish brown, inclining to reddish purple on the upper whorls. Length, 8 mill.

Port Jackson, Australia.

B. PERPUSILLUM, Tryon. Pl. 30, fig. 17.

Brownish, whorls 9–10, with four spiral rows of granules, longitudinally subplicate, base with five additional spiral riblets, suture deep. Length, 6 mill.

Japan.

Described by Dunker as *B. pusillum*, preoccupied by Gould.

B. ALUTACEUM, Gould. Pl. 30, fig. 10.

Whorls strongly longitudinally ribbed, crossed by three spiral ridges, forming three series of large tubercles, interstices deeply pitted, suture deep; brownish, the ridges of the last whorl spotted with chestnut. Length, 6 mill.

China Sea.

B. LAWLEYANUM, Crosse. Pl. 30, figs. 5, 94, 96.

Whorls flatly convex, rounded at the suture, spirally distantly grooved, bluish, white banded. Length, 10 mill.

So. Australia, N. Zealand.

Closely allied to *B. filosum*, Gould, of the West Coast of North America; it is also very nearly related to the next species. *B. insculptum*, Sowb. (fig. 94), is a synonym, and *B. arctum*, Hombr. et Jacq. (fig. 96), described from a single poor specimen, is probably identical; if so its name should have precedence.

B. PLUMBEUM, Sowb. Pl. 30, fig. 23.

Scarcely longitudinally costate, spirally striate, whorls 10, somewhat convex, brownish or plum color. Length, 13 mill.

Australia.

B. LACERTINUM, Gould. Pl. 30, fig. 100.

Whorls crenulated at the edge, with four spiral tuberculated ribs, two upper ribs approximate, the others more distant, with an interstitial line, brownish. Length, 13 mill.

Sydney, N. S. Wales.

This has been considered a synonym of the next species, but I think its relationship rather remote.

B. GRANARIUM, Kiener. Pl. 30, fig. 98.

Longitudinally costulate, crossed and cut into numerous beads by spiral sculpture, base of body whorl smooth or spirally striate, reddish brown or chocolate color, sometimes the beads are chestnut colored on a light ground. Length, 22 mill.

So. Australia, Tasmania.

B. GLAREOSUM, Gould. Pl. 30, fig. 19.

Longitudinally plicate, crossed by four spiral rows of beads, suture excavated, blackish brown. Length, 5 mill.

Loochoo and *Bonin Islands.*

B. PARCUM, Gould. Pl. 30, fig. 20.

Longitudinally roundly plaited, spirally ribbed, ribs tuberculated on the plaits; whorls few, slightly ventricose, the last rather fusiform; yellowish white. Length, 3 mill.

Loochoo Is.

B. PUSILLUM, Gould. Pl. 31, fig. 25.

Longitudinally about 10 ribbed, crossed by four lines on each whorl, forming granules, spiral sculpture more numerous on the last whorl, extending to the base; whorls 8, convex; fulvous.

Length, 5 mill.

Sandwich Is.

B. ALTUM, Sowerby. Pl. 31, fig. 26.

Pale fawn color, with white varices, spirally banded with chestnut, minutely decussated by spiral and longitudinal lines.

Length, 23 mill.

Hab. unknown.

B. OOSIMENSE, Watson. Pl. 30, fig. 12.

Whorls flatly sloping, with about 13 oblique longitudinal ribs, and narrower interstices, the ribs terminating on the spire whorls in a spiral tuberculated angle, just above the suture, on the body whorl becoming gradually evanescent below the angle, spirally striate throughout; brownish grey, suffused with ruddy brown, with white spots where the spiral sculpture crosses the ribs.

Length, 5 mill.

Oosima, Japan.

B. AMBOYNENSE, Watson. Pl. 30, fig. 15.

Whorls with about 20 rounded ribs and narrower interstices, crossed and divided into rounded tubercles by three or four spiral furrows, a smaller spiral thread just above the suture and on the middle of the body whorl, below this, on the latter, the sculpture is continued, but fainter; pale yellowish brown. Length, 3·5 mill.

Amboyna.

B. DIPLAX, Watson. Pl. 30, fig. 14.

With 10–15 small, narrow riblets, with much wider interspaces, crossed on each whorl by two spiral riblets, forming nodules at the intersections, and causing each whorl to have a sloping angle above and below, and a concave flat area between the spirals, base of body whorl with three or four additional, non-tuberculated riblets; white or sandy, with a chestnut tinge towards the apex. Length, 25 mill.

Amboyna.

B. CYLINDRICUM, Watson. Pl. 30, fig. 18.

With about twenty-five longitudinal riblets separated by subequal interspaces, and crossed by three threads, which expand into depressed, rounded tubercles, below the middle of the body whorl the surface is smooth, the pillar defined by a minute spiral thread.

Length, 6·5 mill.

Sydney, N. S. Wales.

B. PUPIFORME, Watson. Pl. 30, fig. 22.

With about twenty-five proximate tuberculated ribs, and three spiral threads on each whorl, and a strong sutural furrow; shell solid; translucent, glossy white. Length, 2·5 mill.

Cape York, Australia.

B. FURVUM, Watson. Pl. 31, fig, 27.

Clathrate by 12–15 narrow ribs, and three narrow spiral riblets, the intersections nodulous, the wide interspaces with decussating microscopic striæ, whorls slightly shouldered, body whorl with several spiral ridges below the middle; dark chestnut colored.

Length, 2·7 mill.

Sydney, N. S. Wales.

B. XANTHUM, Watson. Pl. 30, fig. 24.

Less shouldered and not quite so stout as the preceding species, with about 18 ribs, base longer and more attenuated, no microscopic striæ; shell thin, ochraceous. Length, 3·5 mill.

Torres Strait, N. E. Australia.

B. PERPARVULUM, Watson. Pl. 31, fig. 29.

Shell only about half the size of *B. furvum*, but so close to it in form and sculpture that I suspect that it will prove a minor form of that species. The small differences are comparative only and can be seen by inspecting the respective figures. Yellowish, or pale chestnut, becoming nearly white below, sometimes chestnut or white throughout. Length, 1·5 mill.

N. E. Australia to Sandwich Is.

B. LEUCOCEPHALUM, Watson. Pl. 31, fig. 30.

About 12, rounded ribs, with wider interspaces, crossed by three narrow spiral ridges, the intersections nodulous, whorls a little shouldered as in the preceding species, but not so high, base and aperture also shorter; yellowish or whitish. Length, 2·5 mill.

Off Honolulu, Sandwich Is.

Very like the preceding, with wider, fewer ribs and shorter base.

B. PORCELLANUM, Watson. Pl. 31, fig. 28.

Whorls slopingly shouldered above and below, the wide, flattened middle space only bearing distant narrow longitudinal ribs, base of body whorl with three spiral ridges, porcellanous white and glossy, apex yellowish chestnut with a whitish tip.

Length, 3·75 mill.

Cape York, N. E. Australia.

Section CERITHIDIUM, Monts., 1884.

B. SUBMAMILLATUM, Rayneval. Pl. 29, fig. 84.

Whorls 12, convex, with deep suture, with eight longitudinal ribs and much wider interspaces, crossed by five revolving riblets,

(eight on the body whorl), forming obscure nodules; yellowish or brownish. Length, 5 mill.

Cape Breton; Mediterranean and Black Seas.

It is ? *C. Schwärtzii*, Hornes, a fossil form, and *C. pusillum*, Jeffreys. The last-named would have priority, but Gould used the name for another species six years earlier. Monterosato has enumerated vars. *albina*, *ecostata* and *baliolina*, but without description.

Unfigured Species of Bittium.

B. ORYZA, B. CINEREOFLAVA and var. CROCEA, B. ALABASTRULUM and B. GALACTIS, Mörch. *St. Thomas, W. I.*

B. YUCATECANUM, Dall. *Yucatan Strait.*

B. RUGULOSUM, B. VICINUM, B. BICOLOR, B. GEMMULOSUM, B. LATUM, B. EXILE, all of C. B. Adams. *Jamaica.*

B. ARMILLATUM, B. FASTIGIATUM, Carp. *California.*

B. NITENS, Carp. *C. St. Lucas, L. California.*

B. MINIMUM, B. TURBONILLOIDES, and B. SEMILÆVIS, Tenison-Woods. *Tasmania.*

B. EXILE, Hutton. *New Zealand.*

B. TEREBELLOIDES, Martens (*B. cinctum* and *B. Kirki*, Hutton). *New Zealand.*

B. CRATICULATUM, Gould. *Hongkong.*

B. SCALATUM, Dunker. *Japan.*

Genus POTAMIDES, Brong., 1810.

Subgenus PYRAZUS, Montfort, 1810.

P. EBENINUS, Brug. Pl. 31, fig. 31.

Longitudinally plicate, spirally ridged, angulated, nodose at the angle; dark chocolate color, spire usually lighter colored towards the apex, aperture pale fawn color. Length, 4 in.

Australia, N. Zealand.

P. PACIFICUS, Sowb. Pl. 31, fig. 32.

Chocolate colored or brownish, spirally striated, whorls with an acute spinose-nodose angle. Length, 1·5 in.

Panama to Valparaiso.

? *C. Humboldti*, Val., is a synonym.

P. LAMARCKII, Valenc. Pl. 31, fig. 33.

Fawn or light chocolate color, whorls shouldered, plicate, sloping to a peripheral double angle, with a double line of small tubercles. Length, 1·35 in.

Coast of Cumana, Venezuela.

Subgenus TYMPANOTONOS, Klein., 1753.

P. FUSCATUS, Linn. Pl. 31, fig. 34.

Solid, spinosely tuberculated in the middle of the whorls, with spiral rows of granules above and below the suture, body whorl with two rows of granules below the peripheral angle, base closely spirally ridged; epidermis thick, chocolate brown, aperture yellowish white. Length, 2·3 in.

Gambia, Cape Palmas, W. Africa.

P. muricatus, Brug., and *P. cingulatus*, Gmel., are synonyms.

P. RADULA, Linn. Pl. 31, figs. 35, 36.

Spirally ridged, and beaded by the crossing of longitudinal riblets, whorls concavely channeled below a sutural row of beads, base spirally ridged; epidermis dark chocolate color. Length, 1·75 in.

W. Africa.

Different as this appears from the preceding species, the specimens before me almost prove a transition from one into the other. *P. terebella*, Gmel., *P. granulatus*, Brug., *P. fluviatilis*, and *P. aculeatus*, Gmel., *P. Owenii*, Fer. (fig. 36), are synonyms.

P. HOMOLOGUM, Bayle. Pl. 31, fig. 37.

Narrower, more cylindrical than the preceding species, sculpture similar in pattern, but more minute; variegated chocolate and white. Length, 1·75 in.

W. Coast of Africa.

This is *P. multigranosus*, Sowb., preoccupied by Deshayes for a fossil species.

P. FLUVIATILIS, Potiez et Michaud. Pl. 31, figs. 38–40; Pl. 32, figs. 49, 51, 52.

Whorls flattened, with deeply incised suture, each with three flat-topped spiral ribs, tuberculated in longitudinal rows, tubercles obsolete on the back of the body whorl except a sutural row, base spirally ridged; aperture in the adult expanded, angularly produced above, oblique, outer lip produced below; yellowish white or glaucous, narrowly banded with chocolate, sometimes white-banded at the suture. Length, 2 in.

India, Singapore, Borneo, China, Japan, Philippines, Australia.

The type was a younger shell in which the aperture had not yet expanded; Kiener described the adult as *P. micropterus* (fig. 39). Other synonyms are *P. alatus*, Phil. (fig. 49), *P. radix*, Dufo, *P. incisus*, Hombr. et Jacq. (fig. 51), and var. *minor*, Tapparone Canefri, *P. retifera*, A. Ad. (fig. 40), *P. euryptera*, A. Ad. (fig. 52), a pupoidal-shaped variation, from the Philippines.

P. PALUSTRIS, Linn. Pl. 32, figs. 41, 42.

Whorls flat, with deep suture, divided by three spiral incised lines, upper whorls longitudinally plicate, gradually becoming indistinct below; epidermis and interior dark chocolate, the latter sometimes banded. Length, 4–5 in.

India, Java, Australia.

The synonyms are *P. agnatus*, Gmel., and *P. crassus*, Lam.

P. CALEDONICUS, Jousseaume. Pl. 32, figs. 43, 44.

Like *P. palustris* in sculpture, but the longitudinal ribs much more distinct, form narrower, more cylindrical; yellowish white, more or less banded and blotched with chocolate. Length, 2·5 in.

New Caledonia.

Subgenus TEREBRALIA, Swains., 1840.

P. SEMITRISULCATUS (Bolten), Mörch. Pl. 32, fig. 45.

Upper whorls flat, plaited, all of them with incised revolving lines —of which there are about five on the penultimate whorl; glaucous, more or less broadly banded and variegated with chocolate.

Length, 2·5–3 in.

Australia, Java.

P. SULCATUS, Born. Pl. 32, figs. 46, 47.

Whorls longitudinally strongly ribbed, tuberculated by the crossing of incised spiral sulcations, chocolate brown or glaucous, banded with chocolate, aperture often banded. Length, 1·5–2·25 in.

Singapore, China, Philippines.

The synonyms are *P. Molluccanus*, and *P. fuscus*, Gmel., and *P. Mangiorum*, Schrœter.

P. GOURMYI, Crosse. Pl. 32, fig. 48.

Smooth, finely, closely, spirally striated; epidermis yellowish brown, reticulately longitudinally strigate, or interruptedly blotched with chestnut, interior white. Length, 2·5 in.

N. Caledonia; Bampton Reef, So. Pacific O.

Subgenus TELESCOPIUM, Montf., 1810.

P. TELESCOPIUM, Linn. Pl. 33, fig. 56.

Whorls with about three spiral sulci, dividing broader, flat-topped ridges, base strongly ridged, varying to nearly smooth, channeled around the spirally twisted columella; chocolate brown of varying shades, sometimes obscurely banded. Length, 3–4 in.

India, Singapore, Borneo, Philippines, etc.

P. fuscum, Schum., and *P. indicator*, Montf., are other names for this species.

Subgenus CERITHIDEA, Swainson, 1840.

C. MONTAGNEI, d'Orbigny. Pl. 33, figs. 57, 58; Pl. 32, fig. 50.

Chestnut or chocolate color, with a narrow, medium white band, often with darker bands, interior banded with chocolate and light yellowish brown, base of body whorl defined by a slight ridge. Length, 1·5–1·75 in.

Panama to Lower California; Cerros Is.

It is *C. Reevianum*, C. B. Ad., and *C. Largillierti*, Phil.

Var. PULCHRA, C. B. Ad. Fig. 50.

Whorls varicose, the sculpture stronger, often becoming subnodose.

Gulf of California to Panama; ? Chili.

The synonymy includes *C. varicosa*, Sowb. (preocc. = *C. fortiusculum*, Bayle, fig. 58), *C. Hegwischii*, Phil. and *C. valida*, C. B Ad.

C. OBTUSA, Lam. Pl. 33, figs. 59–61, 63; Pl. 32, fig. 53.

Ventricose, sinuously longitudinally ribbed, spirally grooved, rendering the ribs nodulous; chestnut color, light banded below the suture, and again below the periphery of the body whorl; apex decollated. Length, 2 in.

Malacca, Singapore, Philippines.

Var. KIENERI, Hombr. et Jacq. Figs. 61, 53.

Narrower, ribs more distant, apex not decollated.

Var. QUADRATA, Sowb. Fig. 63.

Whorls white-banded in the middle instead of at the suture.

C. DECOLLATA, Linn. Pl. 32, fig. 54.

Chestnut or chocolate color, usually more or less banded in different shades, with frequently a white band at the suture, closely longitudinally ribbed and spirally striate, the striæ appearing mostly in the interstices of the ribs, apex decollated. Length, 1·33 in.

India, Timor, Madagascar, etc.

Turbo pulcher, Dillw., is a synonym.

C. RHIZOPORARUM, A. Ad. Pl. 33, figs. 67, 62.

More robust and cylindrical than last species, with whorls not so convex, with numerous rounded ribs cut into nodules by spiral ridges, light yellowish brown, with chestnut lines, or a central pair of them, or sometimes a single peripheral band; apex decollated.

Length, 1·33 in.

Borneo and *Philippines*, on Mangroves.

C. Quoyi, Hombr. et Jacq. (fig. 62), is a synonym.

C. CORNEA, A. Ad. Pl. 32, fig. 55.

Thin, obscure brown, rather distantly, smoothly, obliquely ribbed, finely spirally striated, base of last whorl spirally striate, defined by a peripheral ridge; apex decollated. Length, 28 mill.

Borneo, mouths of rivers.

C. ORNATA, A. Ad. Pl. 33, fig. 64.

Chestnut color, white banded below the suture, and below the periphery of the last whorl, distantly, longitudinally, plicately ribbed, scarcely spirally striate except on the base; apex slightly decollated. Length. 1–1·5 in.

Philippines.

C. FORTUNEI, A. Ad. Pl. 33, figs. 65, 66.

Whorls well rounded, iucluding the body whorl, sinuously longitudinally ribbed, spirally striate on the base; glaucous, banded with brown, or all brown; apex acute. Length, 1–1·5 in.

Shanghai, China.

C. SACRATA, Gould. Pl. 33, figs. 69–72.

Epidermis thin, glaucous, under which the shell is chocolate colored, often with a central narrow white band; longitudinally ribbed, and occasionally thickly varicose, crossed by spiral ridges, the crossings varying from nearly smooth to roughly tuberculate; apex usually entire. Length, 1·25 in.

Mazatlan to California.

C. Californica, Hald., is an earlier name for this species, but it has not obtained currency. *C. Mazatlanica*, Carp. (fig. 70), is a roughly sculptured, and *C. pullata*, Gould (fig. 71), an almost smooth form.

Var. ALBONODOSA, Carp. Fig. 72.

Shell smaller, with thick white varices. Length, 1 in.

C. RISSOIDEA, Sowb. Pl. 33, fig. 73.

With curved, longitudinal, oblique ribs, which are noduliferous beneath; whorls convex, base spirally ribbed; brown, the ribs whitish; Length, 19 mill.

Port Natal, So. Africa.

C. MÖRCHII, A. Ad. Pl. 33, fig. 68.

Rather thin, glaucous, more or less spirally lined with red; longitudinally rather faintly ribbed, closely spirally ridged; apex decollated. Length, 1 in.

Philippines.

C. TURRITELLA, Quoy. Pl. 34, figs. 93, 94.

Chestnut colored or lighter, often with a white band, granulated in three or four spiral rows by decussating sculpture, lower part of body whorl with revolving riblets only. Length, 1 in.

Australia.

Almost exactly like *C. conica*, Blainv., of the Mediterranean Sea, as to form and sculpture; the base is longer and more rounded, and it has not the infrasutural white band of that species.

C, BICARINATA, Gray. Pl. 35, figs. 15, 16.

Obscurely, distantly, longitudinally, narrowly plicate, spirally striate, base defined by a double ridge; chocolate color, white at the suture, interior brownish. Length, 1 in.

New Zealand.

C. lutulentum, Kiener, is a synonym.

Var. SUBCARINATA, Sowb. Fig. 16.

Base with three ridges.

C. Australis, Gray (not Lam.), and *C. nigra*, Hombr. et Jacq., are considered synonyms by Hutton.

C. SCALARIFORMIS, Say. Pl. 33, figs. 78, 75, 76.

Whorls slopingly convex, the well impressed suture usually defined by a narrow thread, with numerous, close longitudinal riblets, and less distinct spiral sculpture, base of body whorl with spiral riblets only; whitish, glaucous; light fawn color to chocolate, the lighter colored specimens often with chocolate, the darker ones with whitish lines; aperture like the exterior. Length, 1 in.

Florida.

C. tenuis, Pfr. (fig. 76), is very probably a young shell of this species.

C. IOSTOMA, Pfr. Pl. 34, fig. 79.

Shell strongly longitudinally ribbed and varicose, spirally striate, striæ stronger on the base; chocolate color, with a narrow central white band. Length, 22 mill.

So. Carolina—West Indies, Belize.

Narrower and much more rugose than the preceding species. Reeve's figure is not characteristic. This is probably *C. Lafondi*, Mich., and *C. Hanleyi*, Sowb. (fig. 74), a white variety of it. Many of the figures in d'Orbigny's "Cuba" are so poorly drawn that their recognition is somewhat difficult, yet I think *C. Lavalleana*, d'Orb. (fig. 77), may be referred here, rather than to *C. scalariformis*.

C. COSTATA, Da Costa. Pl. 34, figs. 80–82.

Shell narrowly elongated, with numerous rounded longitudinal ribs, more or less beaded by several spiral riblets, suture well-impressed; chestnut or chocolate color, sometimes white-banded. Length, 15 mill.

West Indies.

C. ambigua, C.B. Ad. (fig. 81), is a vatiety in which the spiral sculpture is more strongly developed, making the surface roughly nodulous; other synonyms are *C. salmacida*, Morelet (fig. 82), and *C. Petitii*, Schramm.

C. TURRITA, Stearns. Pl. 34, fig. 83.

Rather thin, purplish white to chocolate, often with an inconspicuous central white line; whorls convex, with thin, numerous whitish longitudinal ribs, ending below the periphery in a spiral thread, no other spiral sculpture, suture deeply grooved.

Florida.

Section APHANISTYLUS, Fischer, 1884.

C. CHARBONIERI, Petit. Pl. 34, fig. 96.

Thin, corneous brown, smooth, with distant rude, low, longitudinal plications; whorls rather flat, with a spiral thread at the suture, forming a carina on the body whorl, base spirally striated. Length, 1·75 in.

Borneo.

C. unicarinata, Metcalfe, is believed to be identical; it was the first published, but has not been illustrated.

C. SINENSIS, Phil. Pl. 34, figs. 97, 98.

Thin, light corneous, smooth, with low rounded ribs and subequal interspaces, body whorl obtusely angulated at the periphery, base smooth; sometimes a faint chestnut line below the periphery. Length, 1·2 in.

China; Annam.

I think that *C. Moreleti*, Wattebl. (fig. 98), will prove to be a minor form of this species, or perhaps with shell not fully developed; a faint double carina encircles the base. It is from the last-named locality.

Unfigured Species.

C. MINOR, Mörch (*C. minuta*, Dkr. MSS.). *Cuba.*

C. PUPOIDEA, Mörch. *West Indies.*

C. PLICULOSA, Menke. *West Indies.*

C. SIMILIS, C. RARICOSTATA, C. CRASSILABRUM, C. BALTEATA, C. ALBIVARICOSA, all of A. Adams. *Philippines.*

C. ALTERNATA and C. TRICARINATA, Hutton. *New Zealand.*

Subgenus PIRENELLA, Gray, 1847.

P. LAYARDI, A. Ad. Pl. 34, figs. 86, 87, 84.

Glaucous to chocolate color, usually light banded at the suture, whorls with three series of nodules caused by decussating sculpture, on the body-whorl the spiral sculpture becomes more prominent, the ribs fading out. Length, 15 mill.

Ceylon; Cape York, N. Australia.

C. Bombayana, Sowb. (fig. 84), appears to be a more than usually smooth state of this species.

P. CONICA, Blainv. Pl. 34, figs. 88–92, 85.

Glaucous, chestnut or chocolate color, white banded at the suture, and sometimes on the periphery, with three rows of beads on the upper whorls and four rows on the body whorl, formed by decussating sculpture, base with a few spiral ridges. Length, 1 in.

Mediterranean Sea, Red Sea.

The principal synonyms are *C. mamillata*, Phil. (figs. 88–90), and *C. Sardoum*, Cantraine (fig. 92). Monterosato has enumerated color-varieties, *albida*, *fasciata*, *atra* and *fusca*. *C. Cailliaudi*, Pot. et Mich., from the Red Sea, does not appear to differ, except in the nodules being somewhat more prominent; the same may be said of *C. cinerascente*, Pallas (fig. 85), Isle of Karak, Persian Gulf.

P. CLATHRATA, A. Ad. Pl. 27, fig. 18.

White, turreted, whorls 9, ventricose, spirally two-ribbed, crossed by numerous longitudinal plaits forming beads at the intersections, last whorl angular beneath, with a double rib at the angle.

Length, 13 mill.

Ins. Bohol, Philippines.

Described by A. Adams as *Cerithium clathratum*, and changed by Bayle to *C. sinon*, on account of *C. clathratum*, Desh., a fossil species of the Paris basin; the original name can stand under the present classification.

Subgenus LAMPANIA, Gray.

L. AUSTRALIS, Quoy. Pl. 34, figs. 99, 100.

Rather distantly longitudinally plicate, forming a nodulous slight shoulder on the whorls, with spiral beaded riblets and intermediate thread-like striæ; chocolate and glaucous, often white banded at the suture; interior whitish, with chocolate sulcations.

Length, 1·6 in.

Australia.

L. UNDULATUM, Sowb. Pl. 34, fig. 2.

Whorls with rounded, nodulous shoulder, and beaded spiral riblets; light yellowish brown, black-spotted between the shoulder-nodules. Length, 22 mill.

This name being preoccupied in Cerithium for a fossil species, Bayle changed it to *C. rivale*.

L. SUBVIRIDE, Sowb. Pl. 35, fig. 18.

Whorls rather flat, a little tuberculate at the suture, spirally sulcate; yellowish brown, with an interrupted band of chocolate at the suture. Length, 22 mill.

Hab. unknown.

This and the preceding will probably prove identical.

L. DIEMENENSE, Quoy. Pl. 34, fig. 1.

Yellowish olive color, chocolate colored beneath the epidermis, with strong longitudinal plications, and spiral striæ, whorls without shoulder. Length, 18 mill.

Tasmania.

L. CUMINGII, Crosse. Pl. 34, fig. 7.

Short, rather inflated on the lower part of the whorls, spirally sulcated, varicose; yellowish, with a broad chocolate band.

Length, 1 in.

Japan.

L. Steenstrupi, Troschel, is a synonym.

Var. CONCOLOR, Schrenck.

Entirely chocolate color, or obscurely tessellated.

L. ZONALE, Brug. Pl. 34, figs. 3, 4; Pl. 35, fig. 14.

Obscurely longitudinally plaited, forming slight tubercles on the shoulder of the whorls, spirally sulcated; chocolate brown, white banded on the shoulder. Length, 1·5 in.

Hongkong (Stimpson); *Japan* (Lischke).

It is *L. pyrenale*, Quoy.

Var. ATERRIMA, Dunker. Fig. 14.

Shell unicolored, dark chocolate.

Japan.

L. ATRAMENTARIA, A. Ad. Pl. 34, fig. 5.

Whorls somewhat inflated below, spirally sulcate; dark chocolate or obscurely tessellated; white at the suture; columella arched, white. Length, 1·5 in.

Hab. unknown.

L. MULTIFORMIS, Lischke. Pl. 35, fig. 13; Pl. 34, figs. 6, 8.

Short, club-shaped, spirally striate, sometimes with longitudinal ribs, stronger at the suture; chocolate color, or tessellated or banded with white. Length, 1 in.

Japan.

L. Cumingii of Reeve's Iconica (not Crosse).

L. ANGULIFERA, Sowb. Pl. 35, fig. 17.

Whorls flat, angulated on the body-whorl, longitudinally plaited, cut into tubercles by three spiral grooves; brownish or olivaceous-black; aperture grooved. Length, 1 in.

Australia.

Section LAMPANELLA, Mörch, 1876.

L. MINIMUS, Gmelin. Pl. 34, figs, 9–11.

Longitudinally obscurely ribbed, ribs fading towards the middle of the body whorl, spirally ridged, ridges beaded, more nodose above; black (epidermis olivaceous), often with a white sutural band, or white with a central black band, or chestnut or chocolate colored or white or yellowish brown, sometimes white with chocolate lines, interior chocolate brown. Length, 15 mill.

So. Carolina to West Indies; Bermuda.

I have endeavored vainly to separate into several species, as Mörch has done, this very variable form; the coloring patterns have not sufficient constancy for even varietal distinction. The synonyms are:

L. septemstriata, Say, usually applied to specimens with white sutural band, *L. nigrescens*, Menke, for the uniformly dark colored specimens, *L. nigrinum*, Phil., being identical, *L. clathrata*, Menke, *L. heteroclytes*, Lam., *L. striatella*, Dillw., *L. albovittata*, C. B. Ad., *L. Peloritana*, Cantraine, *L. laevigata*, Phil. (= *desolata*, Bayle), probably a worn specimen. *Cerithium Brongniarti*, Marav. (*C. Piraini*, Benoit, and *C. Hymerensis*, Calcara, are said to be synonyms), has been referred here by some European authors; others have considered it a distinct species allied to *C. vulgatum*; its identification remains doubtful.

L. CORNEUM, Kiener. Pl. 35, fig. 19.

Thin, translucent, with rounded whorls and narrow longitudinal plications, spirally striate; reddish brown. Length, 10 mill.

Hab. unknown.

I know nothing about this species; it seems to have escaped subsequent monographers. It is scarcely a member of the present group.

Genus CERITHIOPSIS, Forbes and Hanley, 1853.

C. TUBERCULARIS, Montg. Pl. 35, figs. 20, 22–25, 27.

Apicial whorls smooth, the apex somewhat styliform; normal whorls with three spiral rows of regular, rounded tubercles, periphery of last whorl angular, marked by a thread, base flattened, a little concave; chocolate brown. Length, 6·5 mill.

Europe, Madeira, W. Africa, W. Coast of N. America.

The synonymy includes *C. pulchella*, Jeffreys (fig. 23), *C. Henkelinsii*, Nyst, *C. Clarkii*, Hanley (fig. 25).

Var. ACICULA, Brusina.

Form very narrow, elongated.

C. nana, *C. Barleei* (fig. 27), and *C. acicula*, Jeffreys, are synonyms.

Var. ALBA, Jeffreys.

Shell white.

Var. OBESULA, B. D. D.

Shell smaller, form pupoidal.

Var. BILINEATA, Hœrnes. Fig. 24.

Shell with two rows of tubercles on each whorl.

C. Barleei, Tiberi, *C. ventricosa*, Brusina, *C. Coppolæ*, Aradas, are synonyms.

Var. TUBERCULATA, Carp.

Appears to differ from the European examples only in being more robust.

Vancouver's Isl. to Southern Coast of California.

I have tried in vain to find characters of sufficient importance to distinguish this from the type specifically.

Var. TUBERCULOIDES, Carp. Fig. 22.

Smaller than European examples with the tubercles farther apart. Length, 3·75 mill.

Southern California to Mazatlan.

Var. ALBONODOSA, Carp.

Like the preceding, reddish brown, with whitish tubercles, the 4 nuclear whorls subcarinated.

Mazatlan.

C. MINIMUS, Brusina. Pl. 35, fig. 26.

Pupoidal, embryonal whorls smooth, white, the others dark brown, with three rows of granulations, base convex, spirally striate.

Length, 3 mill.

Europe, Madeira.

Distinguished from the preceding species by its smooth, white embryonal whorls, its smaller size, and rounded striated base. *C. neglecta*, Weink., is a synonym.

C. ATALAYA, Watson. Pl. 35, fig. 28.

Apical whorls 4, longitudinally finely ribbed, cut across by two spiral threads near the bottom of each whorl; normal whorls as in *C. tubercularis*, body whorl with a circumbasal thread, within which the base is radiatingly striated. Length, 6 mill.

Madeira.

Jeffreys considers this a variety of *C. tubercularis*.

C. DIADEMA, Watson. Pl. 35, figs. 30–32.

Apex spirally striate, other apical whorls finely obliquely longitudinally ribbed, becoming keeled below, and finally nodulous; normal whorls as in *C. tubercularis*, base smooth encircled by two ridges, of which the outer one is nodulous. Length, 6·5 mill.

Mediterranean; Madeira.

C. fibula, Jeffreys, and *C. tiara* (fig. 30) and *C. Fayalensis*, Watson (fig. 32), are probable synonyms. Monterosato has referred to a *C. corona*, Watson, and named a variety *scalaris;* I find no description of this species and think it probable that *C. diadema* was intended.

C. HORRIDA, Jeffreys. Pl. 36, fig. 44.

Apex blunt, smooth, next whorl with a few longitudinal ribs, normal whorls as in *C. tubercularis*, base concave, encircled by a slight ridge; color pale brownish yellow. Length, 9 mill.

Mediterranean; Madeira.

C. GEMMULIFERUM, E. A. Smith. Pl. 35, fig. 33.

Whorls 11, the first three smooth, the others with three rows of granules, the infrasutural series small; light brown.

Length, 4 mill.

Whydah, W. Africa.

C. GREENII, C. B. Ad. Pl. 35, fig. 36.

Swollen in the middle, with subulate spire, whorls brown with deep suture, and three rows of granules, base convex, with a few spiral striæ. Length, 4–5 mill.

Massachusetts to Florida.

Dr. Jeffreys considered this = *C. tubercularis*, Mtg., but I think its relationship is closer to *C. minima*, Brusina. I am not prepared to pronounce upon their identity.

C. PUNCTATUM, Linn. Pl. 35, figs. 34, 35.

Whorls flat, longitudinally ribbed, ribs cut into three rows of granules by spiral sculpture, the upper and lower rows more prominent, the middle one often reduced to a mere line, minutely or scarcely granular, and nearer the upper than the lower row, suture deeply excavated, body whorl with the base concave, smooth, encircled by a pair of cord-like ridges; light or dark brown, usually darker brown in the suture. Length, 12 mill.

Massachusetts to Florida; West Indies.

This species is better known to American conchologists as *C. Emersonii*, C. B. Ad. (fig. 35), but was previously described from accidentally occurring European specimens as *C. subulatum*, Montagu, and *C. elegans*, Blainv. Philippi was the first to identify it with *C. punctatum*, Linn., the description of which suits it well.

C. FLAVUM, C. B. Ad. Pl. 35, fig. 37.

Bright yellowish brown, with three spiral carinæ, and about 26 less prominent longitudinal ridges, the intersections feebly nodulous, base bounded by an additional slightly nodulous ridge; whorls 9, slightly convex, thin, with distinct suture, base flattened; canal short, very wide. Length, 5 mill.

Jamaica and St. Thomas, W. I.

C. PULCHELLUM, C. B. Ad. Pl. 35, fig. 38.

Subcylindrical-pupoidal, whorls with two spiral ridges of rather large nodules, of which the upper one is larger, and is doubled on the lower whorls, anteriorly with two additional ridges, of which the upper one is subnodulous; whorls about 11, the lower one a little contracted, terminating obtusely; white, with a brown band on the lower spiral row of tubercles. Length, 3·5 mill.

Jamaica, Guadeloupe, West Indies.

C. GUARANIANUM, d'Orb. Pl. 35, fig. 39.

Shell brown, with four spiral rows of somewhat oblique tubercles, base defined by a thread-like ridge. Length, 3 mill.

Rio Janeiro, Brazil.

C. STEJNEGERI, Dall. Pl. 35, figs. 40, 41.

Thin, purplish, with white nucleus and columella; nucleus smooth, partly immersed, normal whorls 6, strongly sculptured, rather rounded, sculpture consisting of three spiral series of tubercles, separated by rather deep channels, anterior channel bordered by the raised, convex, smooth base. Length, 5·5 mill.

Alaska.

Var. TRUNCATUM, Dall. Fig. 41.

Nuclear whorls large, of a soft, almost fleshy consistency, breaking off in drying.

This is probably a pathological condition of the species, as surmised by Dr. Dall.

C. COLUMNA, Carp. Pl. 35, fig. 21.

Purplish brown, with 9 normal, flat whorls, and distinct suture, having a clathrate pattern of nodules formed by the crossing of longitudinal ribs by three spiral ribs, base rounded, spirally ridged. Length, 8·5 mill.

Vancouver's Isl. to Southern Coast of California.

"Easily recognized, even in portions, by the 'strung-fig' pattern."

C. PURPUREA, Carp. Pl. 35, fig. 43.

Upper half of whorls brown, or brownish purple, lower half white or lighter brown, body whorl brown, with a white peripheral band; with three spiral series of nodules, base rounded, with spiral liræ. Length, 7·5 mill.

California.

C. MUNITA, Carp. Pl. 35, fig. 42.

Like *C. purpurea*, but narrower, with almost straight margins, spiral costæ stronger, nodules less expressed, base equally lirulate. Length, 8 mill.

Vancouver's Island.

C. CONVEXA, Sowb. Pl. 36, fig. 54.

Whorls 10, convex, with deep suture, elegantly cancellated, the intersections subnodose, the interstices quadrate, revolving ribs four on each whorl, peripheral carina not tuberculated, base concave, smoothish. Length, 4·5 mill.

Mazatlan.

C. GRACILLIMA, Sowb. Pl. 36, fig. 45.

Dark brown, longitudinally lightly plicate; spirally tuberculate; whorls oblique, rather ventricose, suture slightly excavated. Length, 9 mill.

Hab. unknown.

I know not whether it is by accident or design that Sowerby's figure represents a reversed shell.

C. DESTRUGESI, Folin. Pl. 36, fig. 46.

Yellowish, brown banded above and below the suture; whorls 14, with four spiral series of beads on each, caused by crossing of longitudinal and spiral riblets, the two middle series smaller, base defined by a ridge, and bearing several liræ. Length, 6 mill.

Bay of Panama.

C. CÆLATUM, Couthouy. Pl. 36, fig. 47.

Light chestnut color, with thirteen scarcely convex whorls; longitudinally plicate and encircled by three rows of nodules, suture impressed, marked by a thread, which also appears on the periphery of the last whorl, base smooth. Length, 19 mill.

Terra del Fuego.

C. PULVIS, Issel. Pl. 36, fig. 48.

Cylindrically pupiform, attenuated towards the apex, which is mucronate, fulvous chestnut; whorls 7–8, almost flat, slowly enlarging, at first smooth, afterwards granulate in three series, the upper row darker colored, base smooth, defined by a row of minute granules. Length, 2·25 mill.

Gulf of Suez.

C. ANGASI, Semper. Pl. 36, fig. 49.

Rather thin, pale yellowish brown; whorls 12, flattened, encircled by three somewhat distant rounded riblets, clathrate by close longi-

tudinal, somewhat undulating, raised striæ, suture deeply impressed, base of last whorl radiately striated. Length, 6 mill.

Port Jackson, Australia.

Described by Angas under the preoccupied name of *C. clathrata.*

C. GRACILIS, Sowb. Pl. 36, figs. 50, 51.

Very slender, white or brownish, reticulated by prominent, minutely beaded spiral ribs, crossed by longitudinal raised lines; whorls oblique, ventricose. Length, 18 mill.

Hab. unknown.

Sowerby's specific name being preoccupied in Cerithium, Bayle changed it to *C. amabile.*

C. SUBRETICULATA, Dunker. Pl. 36, fig. 57.

Shell brownish, whorls 11–12, with three spiral series of granules, of which the middle one is depressed, suture well impressed, base smooth, concave, defined by a thin thread. Length, 6 mill.

Japan.

C. BALTEATA, Watson. Pl. 35, fig. 29.

Whorls with a row of rounded tubercles just below the suture and short longitudinal ribs below them; yellowish white with a broad brown band. Length, 2 mill.

Fiji Is.

Section METAXIA, Monts., 1884.

C. METAXÆ, Chiaje. Pl. 36, figs. 52, 53.

Whorls narrow, convex, with three spiral series of transverse nodules on the upper and four on the lower whorls, the nodules are arranged to show longitudinal ribs; last whorl with carinated periphery, base smooth, flattened or concave; columella twisted, lip deeply cut out at the base; color varying from light yellowish brown to ferruginous red. Length, 8 mill.

Mediterranean.

The synonyms include *C. Crosseana,* Tiberi (fig. 53), *C. subcylindrica,* Brusina, and *C. rugulosum,* Sowb., with its vars. *fulva, flava* and *exilissima,* Mts.

C. ANGUSTISSIMA, Forbes. Pl. 36, fig. 55.

Whorls 16, strongly angulated in the middle, with deep suture, earlier whorls smooth, rounded, subsequent ones ribbed, divided by two nodulous spiral ribs above and two below the carina; yellowish, under a corneous epidermis. Length, 9 mill.

Palermo.

C. Benoitianum, Mts., is a synonym.

Section SEILA, A. Ad., 1861.

C. TEREBRALE, C. B. Ad. Pl. 36, figs. 56, 58.

Whorls 10, flattened, with three sharp, elevated spiral ridges on each, the intermediate channels showing microscopic longitudinal striæ, base short, smooth, bounded by a ridge; chocolate brown.

Length, 7·5 mill.

Massachusetts to West Indies.

The synonyms are *C. terebellum*, C. B. Ad., *C. interruptum* (Menke) Krebs, *C. trilineatum*, Phil. (fig. 58).

C. ASSIMILATA, C. B. Ad. Pl. 36, fig. 59.

Chocolate color, three revolving sharp ribs on the spire whorls, with additional ones on the periphery and base of the body whorl —the last minute; whorls 16–18, flattened, suture very indistinct.

Length, 6–10 mill.

Panama to Mazatlan.

C. CARINATA, E. A. Smith. Pl. 36, fig. 60.

Whorls 15, the first three smooth, convex, with three narrow spiral carinæ, the interstices longitudinally closely striated.

Length, 6 mill.

Whydah, W. Coast of Africa.

C. BACILLUM, Issel. Pl. 36, fig. 63.

Whorls 10–11, convex, with deep suture, whitish, with four spiral cords, and close longitudinal striæ in the interstices, base smooth.

Length, 3 mill.

Red Sea.

C. KANONI, Folin. Pl. 36, fig. 62.

Whitish, shining, maculated with longitudinal chestnut veins; whorls 11, flat, each with three rounded spiral ribs, between them widely longitudinally striated, base smooth, short, concave, defined by a slight ridge. Length, 5 mill.

Bay of Panama.

C. MORELETI, Folin. Pl. 36, fig. 61.

Chestnut brown, yellowish white towards the apex; whorls 11, flat with three revolving narrow ridges, the somewhat wider interspaces distantly longitudinally lirate, as though beaded, base smooth, defined by a thread. Length, 8 mill.

Bay of Panama.

C. DEXTROVERSA, Ads. and Reeve. Pl. 36, fig. 64.

Whorls about 18, spirally tricarinate, the middle carina much smaller, between them wider interspaces or channels, distinctly longitudinally striate; whitish. Length, 12·5 mill.

China Sea.

C. CEREA, Sowb. Pl. 36, fig. 65.

Whitish, with three spiral ribs, and narrower intermediate sulci. Length, 16 mill.

Australia.

C. CROCEA, Angas. Pl. 36, figs. 66, 67.

Rather thin, orange colored, deeper tinted in the channels; whorls 14, each with four rounded, close-set spiral ribs, the very narrow interstices longitudinally striated, base flattened and smooth, nuclear whorl sinistral. Length, 10 mill.

Port Jackson, Australia; Viti Is.

Var. PURPUREA, Angas. Fig. 67.

Purplish brown, the ribs usually lighter tinted, a little more cylindrical, with a narrower base, and smaller than the type. Length, 7 mill. Tenison-Woods has described, but not figured, a variety *Atkinsoni.*

Section LOVENELLA, O. Sars., 1878.

C. METULA, Lovén. Pl. 36, fig. 68.

Solid, opaque, glossy, yellowish white; whorls 18–20 with two or three thread-like spiral ridges (four or five on the last whorl) and slight microscopic intermediate striæ and growth lines, the ridges are crossed by numerous curved, fine ribs, producing nodules or small tubercles at the points of intersection, base and apical whorls smoothish, the apex bulbous and obliquely twisted; canal distinct, narrow, twisted. Length, 20 mill.

Norway to Bay of Biscay, Villafranca.

C. nitidum, McAndrew and Forbes, is a synonym.

C. OBELISCOIDES, Jeffreys. Pl. 36, fig. 69.

Rather thin, semitransparent, glossy, white; whorls 7–9, convex, with deep suture defined by a spiral thread, with numerous fine longitudinal striæ, and several thin spiral threads on the middle of the whorls. Length, 4 mill.

Atlantic O. (Porcupine Exped.).

C. CYLINDRATUM. Jeffreys. Pl. 36, fig. 70.

Thick, opaque, lustreless, pale yellowish brown; whorls 10–12, rounded, but compressed, with numerous straight longitudinal,

crossed by three spiral riblets, the intersections minutely beaded, body whorl with four spiral striæ, besides a line below the periphery.

Length, 5 mill.

Mediterranean, Atlantic.

C. PROCERUM, Jeffreys. Pl. 36, fig. 71.

Solid, opaque, pale yellowish white, glossy; whorls 13–14, somewhat convex, with curved, oblique longitudinal ribs, about 30 on the last and 20 on the penultimate whorl, three uppermost whorls nearly smooth, base marked with flexuous striæ, in continuation of the ribs, periphery of last whorl with a spiral ridge.

Length, 10 mill.

Between Scotland and Faroë Is.

C. Danielseni, Friele, is a synonym.

C. BIZONALIS, Jeffreys. Pl. 36, fig. 72.

This is a fragment obtained by the Porcupine Expedition in the North Atlantic O. It shows longitudinal distant riblets crossed by two distant spiral riblets on each whorl.

C. WHITEAVESII, Verrill. Pl. 36, fig. 73.

Whorls angular, with longitudinal riblets, forming tubercles on the angle, and an inferior row of tubercles just below the suture; the body whorl has a spiral thread below the angle, with a smooth base.

Length, 4 mill.

Off Martha's Vineyard, Mass. (365–500 fms.); *Gulf of St. Lawrence* (200 fms.).

C. costulata, Whiteaves (not Möller), is a synonym.

Section EUMETA, Mörch, 1868.

C. COSTULATA, Möller. Pl. 36, fig. 74.

Shell solid, semitransparent, glossy, white, with sharp, prominent longitudinal ribs, cut off at the periphery by a spiral ridge; ribs traversed and indented by two or three thread-like impressed lines or striæ, besides slighter, finer intermediate striæ in the interstices of the ribs and on the base. Length, 10 mill.

Northern Europe—Arctic America—New England.

It is *Bittium arcticum*, Mörch, and *C. Naiadis*, Woodward.

Unfigured Species of Cerithiopsis.

C. HANLEYANA, C. CONTIGUA, Monts. *Mediterranean.*

C. CINGULATA, A. Ad. *Japan.*

C. INTERCALARIS (*Guacomayo*), C. FORTIOR (*Sta. Barbara, Cal.*), of Carpenter.

C. CEREA, C. SOREX, C. DECUSSATA, C. PUPIFORMIS, Carpenter. *Mazatlan.*

C. NEGLECTA, C. BIMARGINATA, C. B. Adams. *Panama.*

C. FUSIFORME, C. B. Ad. (*C. neglecta*, Sowb., not Adams, may be the same). *Jamaica.*

C. CRYSTALLINA, C. SIGSBEANA, Dall. *West Indies.*

C. JOHNSTONI, Petterd. *Tasmania.*

C. ALBOSUTURA, Tenison-Woods. *Tasmania.*

C. SCABRELLA, Tapparone-Canefri. *Papuan Is.*

C. PAXILLUS, C. ROSEA, C. PAGODULUS, C. CERINA, C. BACULUM, C. CLAVULA, of A. Adams. *Japan.*

C. AURANTIACA, C. LAQUEATA, C. RUGOSA, C. SEMIPICTA, of Gould. *China Sea.*

Subgenus LÆOCOCHILIS, Dunker and Metzger, 1874.

L. GRANOSA, S. Wood. Pl. 36, fig. 75.

Shell reversed, whorls well-rounded, closely spirally ridged, lower part of body whorl smooth, occasionally longitudinal sculpture is developed; white. Length, 40 mill.

Arctic Europe.

First described as a pliocene fossil. It is *L. Pommeraniæ*, Dunker and Metzger, *Triforis MacAndreæ*, A. Ad., and *T. nivea*, M. Sars, MSS.

Genus TRIFORIS, Desh., 1824.

T. REGALIS, Jouss. Pl. 37, fig. 76.

Solid, white, or rarely maculated with chestnut, truncate, persistent whorls about 12, longitudinally costate, cut by closer spiral sculpture, suture scarcely impressed, thread-margined.

Length, 8–11 mill.

New Caledonia.

Very closely allied to the next species.

T. NODIFERUS, Ad. and Reeve. Pl. 37, fig. 77.

Whorls 12–14, turreted, subangulated in the middle, nodose in three spiral series, nodules strongest on the angle; white.

Length, 7 mill.

China Sea.

T. TIBIALIS, Jouss. Pl. 37, fig. 78.

Solid, white, with interrupted chestnut lines, costate, granulated by the crossing of four spiral liræ; whorls 17, suture scarcely conspicuous; aperture chestnut and white, maculated. Length, 13 mill.

Tahiti.

T. GIGAS, Hinds. Pl. 37, fig. 79.

Long and narrow, whorls 25–28, planulate, granular in four spiral series, the lower one the strongest, base granularly punctate.

Length, 1 in.

New Guinea.

T. ACUTUS, Kiener. Pl. 37, fig. 85.

Shining, whitish, with numerous whorls, triseriately granular.

Length, 10 mill.

Hab. unknown.

A doubtful species.

T. CONCORS, Hinds. Pl. 37, fig. 80.

Whorls 22, flattened, with three spiral series of nodules, the middle one smallest, suture lined. Length, 14 mill.

Straits of Malacca.

T. DOLICHA, Watson. Pl. 37, fig. 81.

Whorls 11, flat, with channeled suture, the ribs made nodulous by three spiral series of lines, base defined by a carina, two-threaded, canal short and broad; light brown, with dark stains.

Length, 5 mill.

N. E. Australia.

T. SCULPTUS, Hinds. Pl. 37, figs. 82, 83.

Light brownish, with 15–18 concave whorls, nodosely carinate above and below, with a smaller carina in the middle.

Length, 12 mill.

Straits of Malacca.

T. pyramidalis, Ad. and Reeve (fig. 83), from China Sea, appears to be identical.

T. REEVEI, Desh. Pl. 37, fig. 84.

Whitish, with a black tip; whorls 15, narrow, each bearing a row of granules above and below, the lower row smaller, concave between them. Length, 5 mill.

Isle of Bourbon.

Smaller than the preceding, without the centre carina, but very likely the same species, notwithstanding these differences.

T. BILIX, Hinds. Pl. 37, fig. 86.

Outline a little convex on the sides, whorls 18, light colored, tricarinate, the lower carina larger, marbled, middle carina smallest.

Length, 7 mill.

Straits of Malacca.

T. MAXILLARIS, Hinds. Pl. 37, fig. 87.

Roseate or light chocolate color, whorls 16–18, smooth, bisulcate, the margins of the sulcations very minutely granular, as are those of the sulcate suture. Length, 13 mill.

Straits of Malacca.

T. MICANS, Hinds. Pl. 37, figs. 88, 89.

Brownish, with 20–22 whorls, each with three series of whitish granules, the lower series largest, the upper one smallest.

Length, 14 mill.

New Guinea.

I think that *T. alveolatus*, Ad. and Reeve (fig. 89), from China Sea is synonymous.

T. VERRUCOSUS, Ad. and Reeve. Pl. 37, fig. 91.

Whorls 18–20, with three spiral series of transversely oblong, strong tubercles; whitish. Length, 8·5 mill.

China Sea.

T. HINDSI, Desh. Pl. 37, fig. 90.

Light brownish, sides slightly convex; whorls 12, with three subequal spiral series of whitish granules. Length, 6 mill.

Isle of Bourbon.

T. FORMOSUS, Desh. Pl. 37, fig. 92.

Light violaceous, sides a little convex; whorls 15, flattened, with channeled suture, each bearing a spiral row of whitish granulations above and below. Length, 6 mill.

Isle of Bourbon.

T. ANGASI, Crosse. Pl. 37, fig. 93.

Rather thin, brownish; whorls 15, with three spiral series of quadrate, flattened tubercles, the body whorl with four series, the lower one bearing a white band; aperture lirate with brown within.

Length, 7 mill.

Gulf of St. Vincent, N. Australia; N. Zealand.

Cerithium minimum, Hutton, is a synonym.

T. MARMORATUS, Pease. Pl. 37, fig. 94.

Whorls 15, slightly convex, with three spiral series of granules, the lower series largest; light brownish, the granules white.

Length, 10 mill.

Sandwich Is.

T. FUSCA, Dunker. Pl. 37, fig. 95.

Somewhat solid, brownish, sides a little convex; whorls 12–14, with distinct suture, with close, subconfluent granules in three spiral series, the middle narrower and fainter. Length, 10–11 mill.

Japan.

T. ISLEANUS, Velain. Pl. 37, fig. 96.

Shell yellowish, whorls 14 or 15, scarcely convex, with three spiral rows of granules, the upper one less developed.

Length, 9 mill.

Islands of St. Paul and Amsterdam, Ind. Ocean.

T. MALVACEUS, Jousseaume. Pl. 37, figs. 97, 97a.

Rather solid, violet-ash color, granules white; whorls 18, biseriately, spirally granulated, the granules margining the suture on either side. Length, 5–9 mill.

New Caledonia.

T. DOUVILLEI, Jouss. Pl. 37, fig. 98.

Solid, yellowish white; whorls 15, biseriately spirally granulated Length, 6 mill.

Mauritius.

T. BLAINVILLI, Jouss. Pl. 37, fig. 99.

Rather solid, light cinnamon brown; whorls 16–17, with three spiral series of tubercles, and well impressed suture, body whorl with two additional carinæ, not tuberculated. Length, 4·5 mill.

N. Caledonia.

T. MARIEI, Jouss. Pl. 37, fig. 100.

Rather solid, narrow, yellowish white; whorls 15, flat, with three spiral series of granules, the middle one smaller, the first whitish, the third yellowish, body whorl with two additional series.

Length, 6·5 mill.

N. Caledonia.

T. BIGEMMA, Watson. Pl. 37, fig. 1.

Solid, yellowish white, pale brownish at the base of each whorl and base of body whorl; whorls about 22, convex, with deep suture,

minutely margined above and below, with two spiral rows of tubercles, connected in each row by a spiral thread, and a much smaller row of granules next below the suture. Length, 15 mill.

West Indies, 390–640 fms.

T. cylindrellus, Dall. (unfigured), is referred here by Jousseaume, and *T. abruptus*, Dall. (unfigured), is said to be a variety.

T. HEBES, Watson. Pl. 37, fig. 2.

Solid, translucent white, whorls 12, with three spiral rows of strong tubercles, separated by spiral squared channels, margin of base defined by a thread. Length, 6 mill.

Tristan da Cunha Islands, So. Atlantic O.

T. INFLATA, Watson. Pl. 37, fig. 3.

Solid, opaque, glossy, white; whorls 13, the normal ones slightly convex, with two spiral rows of tubercles, separated by a narrow triangular furrow, below them is a wider furrow, extending to the suture, above the suture is defined by a narrow marginal line, which is undulated rather than tuberculated. Length, 5 mill.

West Indies, 390–640 fms.

T. ASPERA, Jeffreys. Pl. 38, fig. 5.

Rather solid, nearly opaque and glossy, pale yellowish, with a faint tinge of brown, apical whorls dark brown; whorls 21–22, with two spiral series of strong tubercles and a subsutural series of minute granules, base with two spiral lines, and defined by a strong peripheral ridge, suture slight. Length, 15 mill.

Bay of Biscay; Sciacca, Sicily; Gulf of Mexico.

More slender, with stronger tubercles and more abrupt base than *T. perversa.*

T. ASPERRIMUS, Hinds. Pl. 38, fig. 6.

Whorls 24–26, angulated in the middle, with two spiral series of tubercles, granularly carinate near the suture. Length, 13·5 mill.

New Guinea.

Distinguished by its very narrow form.

T. GEMMULATUS, Ads. and Reeve. Pl. 38, fig. 7.

Pyramidal, with abruptly plain base, pellucid white; whorls 12–15, with three distant series of granules, the central one narrow, almost obsolete, causing the whorls to be concave in the middle, suture defined by a marginal line. Length, 7 mill.

China Sea.

T. ANGUSTISSIMUS, Desh. Pl. 38, fig. 8.

Shining, whitish, marbled with chestnut; whorls 14, narrow, with two series of rounded tubercles, last whorl with a peripheral carina and several raised lines on the base. Length, 4 mill.

Isle of Bourbon.

T. PFEIFFERI, Crosse. Pl. 38, fig. 9.

Rather thin, subtranslucent, whitish, regularly maculated with chestnut, whorls 18, with three spiral rows of beads, the middle one minute, the lower largest, and bordered below by a thread—which is articulated with white and chestnut, base smooth.

Length, 8 mill.

Gulf of St. Vincent, N. Australia.

T. MIRIFICUS, Desh. Pl, 38, fig. 10.

Yellowish white, whorls 15, narrow, each with two rows of pellucid granules, and a wide concave interspace, on the body whorl four rows of granules, which are smaller. Length, 7 mill.

Isle of Bourbon.

T. DECORATUS, C. B. Adams. Pl. 37, fig. 4.

White, maculated with somewhat quadrangular large chestnut or chocolate spots, with three nearly equal spiral rows of beads and intermediate, narrow, deep channels, body whorl anteriorly with two additional smaller, more or less beaded spiral ridges; whorls 16, planulate, the suture deeply grooved. Length, 14 mill.

West Indies, Florida.

Section MASTONIA, Hinds, 1844.

T. VIOLACEUS, Quoy. Pl. 38, figs. 11, 12.

With convex sides and base, violaceus, whorls 20, suture slightly grooved, whorls with two rows of tubercles, which are rounded, rosy white. Length, 8–10 mill.

New Caledonia, New Ireland, Viti Is.

T. Ducosensis, Jouss. (fig. 12), was separated because it has only one canal-opening, whilst the true *violaceus* has a dorsal one remaining; a merely individual difference, as I have explained.

T. RUBER, Hinds. Pl. 38, figs. 13–16.

Pink, with the two rows of granules on each whorl, which are often yellowish, suture marked by a raised line. Length, 9 mill.

New Ireland, Tahiti, Isle of Bourbon.

T. roseus, Hinds (fig, 14), appears to differ only in the interposition of a minute additional series of tubercles; a condition fore-

shadowed, according to Hinds, in some of the specimens of the typical *ruber*. *T. distinctus* (fig. 15) and *T. Adamsi* (fig. 16), of Deshayes, from the Isle of Bourbon, may be considered identical with *T. roseus*.

T. VULPINUS, Hinds. Pl. 38, fig. 17.

Whorls 14, with three nodulous spiral carinæ, blackish, the lower carina white. Length, 6·5 mill.

New Ireland.

T. MONILIFER, Hinds. Pl. 38, fig. 18.

Whorls 10, biseriately spirally granular, the upper series white, the lower one articulated in the intervals with chestnut or chocolate. Length, 6 mill.

Straits of Malacca.

T. GRANULATUS, Ads. and Reeve. Pl. 38, fig. 19.

Whorls 12–14, yellowish white, with three crowded spiral series of nodules—five series on the body-whorl. Length, 6 mill.

China Sea.

T. SUTURALIS, Ads. and Reeve. Pl. 38, fig. 20.

Whorls 12–13, pellucid white, with three spiral series of granules, suture channeled, smooth, body whorl with an additional smaller series of granules and smooth base. Length, 6 mill.

China Sea.

T. SPECIOSUS, Ads. and Reeve. Pl. 38, fig. 24.

Whorls 18–20, biseriately nodose, the upper series much the largest; whitish, with an orange-red line below the upper series of nodules. Length, 8 mill.

China Sea.

T. ACICULA, Issel. Pl. 38, fig. 25.

Whorls 14, with two series of small granules and a wide, shallow interspace on each whorl, suture deeply channeled.

Length, 3·5 mill.

Red Sea.

T. CLEMENS, Hinds. Pl. 38, fig. 21.

Whorls 15, triseriately granose, the middle series minute, the lower one large; yellowish corneous, the granules paler.

Length, 6·5 mill.

Straits of Malacca.

T. Carteretensis, Hinds. Pl. 38. fig. 22.

Whorls 14, triseriately granular, sulcate between the series, middle series small; yellowish white. Length, 6·4 mill.

Port Carteret, New Ireland.

T. crenulatus, Desh. Pl. 38, fig. 29.

Whorls 14, triseriately ridged, the lower ridge granular; yellowish white, with oblong, subquadrangular chestnut stripes.

Length, 9 mill.

Isle of Bourbon.

This is said to be a doubtful synonym of *T. æmulans*, Hinds (unfigured).

T. Tasmanica, Tenison Woods. Pl. 38, fig. 31.

Whorls about 12, yellowish, triseriately granular, the lower row chestnut-spotted between the granules, suture deeply channeled, body whorl with several ridges, without tubercles, on the base.

Length, 6 mill.

Tasmania.

T. concinnus, Hinds. Pl. 38, fig. 23.

Whorls 11, triseriately granular, middle series small; yellowish brown, the lower series of granules black or brown, body whorl with five series of granules and two bands. Length, 6 mill.

Pacific Ocean (Hinds).

A specimen in the collection of the Academy at Philadelphia is labelled "Honduras".

T. pupæformis, Desh. Pl. 38, fig. 26.

Whorls 12, suture scarcely distinctly channeled, biseriately granose, the granules lighter colored on a purplish ground, base bisulcate. Length, 4 mill.

Isle of Bourbon.

T. atomus, Issel. Pl. 38, figs. 33, 32.

Similar to the above in form, ornamentation and color, but with three rows of basal granules, instead of the two sulci; whorls 6.

Length, 1·5–2·5 mill.

Red Sea, Mauritius.

Very likely this will prove synonymous with *T. pupæformis*. The last locality is for *T. crassula*, Martens (fig. 32).

T. OBESULA, Jouss. Pl. 38, fig. 27.

Whorls 13, brownish; becoming yellowish at the tip and base, with three series of spiral nodules, of which the middle one is minute, the body whorl with five series of nodules. Length, 4 mill.

New Caledonia.

T. PERLATUS, Issel. Pl. 38, figs. 28, 34.

Shining, whitish, whorls 12–13, with two spiral series of equal nodules, body whorl with three additional smaller anterior series of nodules. Length, 4–5 mill.

Red Sea.

Narrower than *T. atomus*, but similarly ornamented. *T. Servaini*, Jouss. (fig. 34), has a general coloring of dark yellow, but seen through a glass it has a yellow band and a white one on each whorl, the latter with dark spots between the nodules; it comes from the Red Sea also, and will, I think, prove to be a better colored specimen of the above.

T. CHAPERI, Jouss. Pl. 38, fig. 35.

Solid, white, yellowish brown at the base, whorls 12–14, biseriately tuberculated, last whorl with three series, suture linear.

Length, 4 mill.

Isle of Bourbon.

T. XYSTICA, Jouss. Pl. 38, fig. 36.

Shell chocolate color, the tubercles whitish; whorls 14–15, flattened, with channeled suture, and three spiral series of tubercles, last whorl with five series. Length, 13 mill.

Madagascar.

T. ROSSITERI, Jouss. Pl. 39, fig. 39.

Whorls 14, flattened, with channeled suture, reddish yellow, with four spiral series of sharp whitish granules, eight series on the body whorl. Length, 5–6 mill.

New Caledonia.

T. ÆGLE, Jouss. Pl. 39, fig. 40.

Yellowish ash color, tubercles paler: whorls 15, biseriately tuberculate, last whorl with three additional, smaller, anterior series.

Length, 5 mill.

New Caledonia.

T. CNODAX, Jouss. Pl. 39, fig. 47.

Rather solid, yellowish, with the tubercles red; whorls 15, subdistantly biseriately sharply tuberculated, the body whorl with three series. Length, 6 mill.

N. Caledonia.

T. FUNEBRIS, Jouss. Pl. 39, fig. 48.

Solid, whorls 15, each with a band of black, followed by one of white, biseriately tuberculate, body whorl with four series, of which three are black, the lower one being white. Length, 4–6 mill.

New Caledonia.

T. LIMOSA, Jouss. Pl. 39, fig. 38.

Rather solid, blackish-brown; whorls 16–17, biseriately tuberculate, the wider interspace with a median line, suture scarcely distinct, last whorl with six series of ridges, of which the three anterior ones are unarmed, Length, 8 mill.

N. Caledonia.

T. LEVUKENSE, Watson. Pl. 39, fig. 37.

Solid, yellowish white, with an interrupted amber-colored thread near the base of each whorl, glossy; whorls 17, suture sharply impressed, margined above by a minute flat surface, triseriately tuberculated, with two additional anterior smaller series on the body whorl. Length, 5·5 mill.

Viti Is.

T. RUFULA, Watson. Pl. 39, fig. 41.

With five apical and eight normal whorls, yellow, more or less ruddy, clathrate by distant rounded longitudinal and three spiral riblets, the intersections nodose, suture deeply channeled, body whorl with several ridges below the tubercles. Length, 7·5 mill.

Off Wednesday Island, Cape York, N. E. Australia.

T. CINGULIFERUS, Pease. Pl. 39, fig. 43.

Whorls 10, biseriately granular, with sometimes a minute series between the two on the later whorls; yellowish, the lower series chestnut colored, the base with additional alternate yellow and chestnut granular ridges. Length, 6 mill.

Sandwich Is.

T. TRICOLOR, Jouss. Pl. 39, fig. 49.

Solid, whorls 14–15, pale yellowish with two sutural bands, one white, the other black, triseriately tuberculate, last whorl with five series, suture deeply channeled, Length, 6 mill.

N. Caledonia.

T. ALTERNATUS, C. B. Adams. Pl. 39, fig. 50.

White, with a brown band below the suture, whorls 17, with inconspicuous suture, triseriately tuberculated, with two additional non-tuberculated ribs on the last whorl. Length, 7·5 mill.

Panama.

T. cucullatus, Folin, is a synonym.

T. TRISTOMA, Blainv. Pl. 39, fig. 42.

Whorls 15, triseriately tuberculated, the upper row strongest, suture whitish, channeled, with a minute row of granules; yellowish-chestnut, with a row of darker spots between the granules of the lower series. Length, 12 mill.

Australia.

The species was based upon its "three-mouths," and can no longer be identified with certainty.

T. EXILIS, Dunker. Pl. 39, fig. 45.

Whorls 10–11, triseriately granose, suture narrow, not deep, brownish, with a lighter line. Length, 5 mill.

Japan.

T. PERVERSUS, Linn. Pl. 39, figs. 44, 51.

Whorls about 16–18, flat, clathrate, with three series of rovolving and numerous longitudinal riblets, the intersections nodulose, body whorl with four spiral series, below which are two spiral ribs; yellowish brown, or chestnut color. Length, 15–30 mill.

Europe, Canary Is.

The synonyms are *T. Maroccanus*, Brug., *T. radula*, Olivi, *T. reticulatus*, Donov., *T. granulosus*, Scacchi, *T. tuberculariis*, Blainv., *T. seriatus*, Muhlf., *T. inversus*, Costa, *T. Savignyanus*, Chiaje, to which European authors often add *Cerithium pusillum*, Pfr.

Var. BENOITIANUM, Aradas.

Established on a single individual 34·5 mill. long, with four series of granules on the spire and five on the body whorl, lip much dilated.

Ognina.

Var. ADVERSA, Montg. Fig. 51.

Shell smaller, 15 mill. long. This = var. *minor*, Monts., and *T. Belli*. Wood. It is found also on the California coast—at least no differences have been detected between these and European examples.

There are also vars. *cylindrata*, *obesula* and *attenuata*, Monts., founded upon the form of the shell, and the following color-varieties.

Var. BICOLOR, Mts. Brown, with white tubercles.

Var. CINCTA, Mts. Brown, with a white median zone.

Var. PALLESCENS, Jeffreys. Light fawn color.

Var. LACTEA, Mts. White.

T. NIGROCINCTUS, C. B. Ad. Pl. 39, fig. 52.

Dark chocolate color; whorls about 13–15, with three series of subequal granules, suture excavated, bearing a thread, body whorl with four series of tubercles, and two or three basal ridges below them. Length, 10 mill.

New England to West Indies.

Generally considered by European conchologists a variety of *T. perversus*, Linn., and perhaps should be relegated to that species. Dark specimens are unicolored, but lighter ones show the sutural thread darker—whence the name. *T. modestum*, Ads., appears to be the same, and Mörch refers here *Cerithium pusillum*, Pfr.

T. TURRIS-THOMÆ, Chemn. Pl. 39, fig. 53.

Whorls 11, each with a spiral series of large white tubercles, and a much smaller chestnut colored series, forming a band.

Length, 5 mill.

West Indies.

T. mirabilis, Ads., is a synonym.

T. INTERMEDIUS, C. B. Adams. Pl. 39, fig. 54.

Whorls about 12, at first with two, afterwards with three spiral series of tubercles, and three additional less nodulous ridges at the base of the body whorl; reddish brown, with a white spiral band on the lower part of the whorls. Length, 6–8 mill.

West Indies.

This is *T. turris-Thomæ*, d'Orb., not Chem.

T. ORNATUS, Desh. Pl. 39, fig. 46.

Triseriately tuberculate, dark brown, with here and there a white tubercle, and the lower series white banded. Length, 7–10 mill.

West Indies.

This and the two preceding species, though nearly related, appear to be distinct; the present is the most robust of the three.

Section SYCHAR, Hinds, 1844.

T. VITREA, Hinds. Pl. 39, fig. 55.

Pellucid, yellowish white; whorls 15, smooth, rounded, with a strong median raised line and a smaller one below it.

Length, 10 mill.

Straits of Malacca.

Section VIRIOLA, Jousseaume, 1884.

T. VITTATUS, Hinds. Pl. 39, fig. 57.

Smooth, corneous, with a central dark brown line; whorls 22–25, with two subequal spiral ridges and alternate sulci.

Length, 18 mill.

Straits of Malacca.

T. BAYANI, Jouss. Pl. 39, fig. 56.

Solid, reddish-purple, a little shining; whorls 23, with three spiral carinæ, the interstices clathrate, suture linear, thread-margined, last whorl 5-carinate, aperture white, brown-zoned.

Length, 17 mill.

New Caledonia.

Is very probably a synonym of the next species.

T. CORRUGATUS, Hinds. Pl. 39, fig. 59.

Corneous; whorls 17–20 tricarinate, the middle carina smaller, corrugated between them, suture with a thread-like margin.

Length, 15 mill.

New Guinea.

T. CONNATUM, Montr. Pl. 39, fig. 60.

Whorls exceeding twenty, with three or four cingulæ, the wider interstices longitudinally punctate; chocolate color.

Length, 13–15 mill.

New Caledonia.

T. DUNKERI, Jouss. Pl. 39, fig. 61.

Rather solid, brownish; whorls 14–16 with two strong and one thin revolving ribs, the interstices longitudinally costulate and spirally striate; base planate. Length, 9 mill.

Japan.

Described by Dunker as *T. cingulata*, preoccupied by A. Adams.

T. ELEGANS, Hinds. Pl. 39, fig. 62.

White, marbled with chestnut; whorls 16–18, quadricarinate, carinæ alternating in size, close, maculated with white and chestnut.

Length, 10 mill.

Straits of Malacca.

T. CANCELLATUS, Hinds. Pl. 39, fig. 64.

Whorls 15–18, yellowish brown, bicarinate, the carinæ maculated with white, cancellated between them and marked by alternate chestnut and white longitudinal lines; suture channeled.

Length, 10 mill.

Straits of Malacca.

T. HILARIS, Hinds. Pl. 39, fig. 63.

Whorls 14, tricarinate, the two lower carinæ subequal, whitish, the upper one a little larger, maculated with chestnut.

Length, 10 mill.

Pacific Ocean (Hinds).

T. INCISUS, Pease. Pl. 39, fig. 65.

Whorls encircled by three prominent, smooth, regular ribs, interstices deep, very finely longitudinally striated; irregularly spotted and marbled with various shades of yellowish white, brown and purple.

Sandwich Is., Isle of Bourbon.

The last named locality is for *T. triliratus*, Desh., which Pease considered a synonym.

T. DEXTROVERSUS, Ads. and Reeve. Pl. 39, fig. 58.

Shell dextral, whorls 17–18, concave in the middle, spirally tricarinate, the middle carina much smaller, the interstices minutely concentrically striated, yellowish white. Length, 12 mill.

China Sea.

Differs from all the other species in being dextral, and for that reason I have already included it in Cerithiopsis; as it has usually been considered a Triforis, I repeat the description here.

Unfigured and Doubtful Species.

T. VARIEGATUS, A. Ad. (= *T. Arthuri*, Jouss.) *St. John's, W. I.*

T. INFREQUENS, T. BIMARGINATUS, C. B. Ad. *Panama.*

T. LACTEA, T. IANTHINA, T. MARGARITACEA, T. GRANULIFERA, T. VENUSTULA, T. DISTINGUENDA, of Dunker. *Viti Is.*

T. HARPERI, Jouss. (*T. alternata*, Pease) *Sandwich Is.*

T. BICOLOR, Pease. *Sandwich Is.*

T. FASCIATUS, Tenison Woods. *Tasmania.*

T. NIGRO-FUSCUS, and T. LABIATUS, A. Ad. *Sydney, Australia.*

T. CONSPERSUS, A. Ad. *Japan.*

T. LUSORIUS, T. LINEOLATUS, T. MINUTISSIMUS, Tapparone-Canefri. *New Guinea.*

T. INTERFILATUS (*Hongkong*), T. CALCULIFERUS (*Loo Choo*), T. CLATHRATUS, and T. INTERCALARIS (*China Seas*), of Gould.

T. KAUAINUS, Jouss. (*T. gracilis*, Pease, preocc. by himself). *Sandwich Is.*

T. ORYZA, T. BRUNNEUS, T. MACULATUS, T. PUSTULOSUS, T. TUBERCULATUS, Pease. *Sandwich Is.*

T. GRANOSUS (*Tahiti*), T. CYLINDRICUS (*Ins. Apaiang*), T. ROBUSTUS (*Ins. Makaimo*), T. PUNCTATUS and T. COSTATUS (*Ins. Annaa*), of Pease.

T. TRITICEA, T. PALLIDUS, T. SULCOSUS, T. GRACILIS, T. PERFECTUS, T. FLAMMULATA, T. SIMILIS, T. MINIMUS, T. CLAVATA, all of Pease. *Sandwich Is.*

T. PEASEI, Jouss. (*T. affinis*, Pse., preocc.). *Sandwich Is.*

T. FESTIVUS, T. SCITULUS (*Port Lincoln, Australia*), T. PULCHELLUS (*Hab. unknown*), T. VESTALIS and T. ALBIDUS (*Honduras*), T. CINGULATUS (*Red Sea*), all of A. Adams.

T. IBEX, T. COLON, T. INTERMEDIUS, T. TRISERIALIS, T. LONGISSIMUS, T. TORTICULUS, T. HIRCUS, all of Dall. *West Indies.*

T. NANA, T. PUSIOLA, T. SCHMELTZIANA, T. QUADRILINEATA, T. PENUTICULATA, T. VENTROSULA, all of Dunker. *Upolu*, etc.

T. EXIGUUS, T. NANUS, T. DEALBATUS, T. MELANURA, of C. B. Adams. *Jamaica.*

T. MARMORATUS and T. AFFINIS (*West Indies*), T. GRAYI (*Mediterranean*), T. COLLARIS and T. PAGODUS (*Philippines*), T. ÆMULANS and T. CŒLEBS (*Pacific Ocean*), T. CASTUS, T. CANDIDUS, T. TRISTIS and T. METCALFEI (*Hab. unknown*), all of Hinds.

T. EXILE and T. DEFORME, Eichw. These are generally referred to *C. ferrugineum*, Brug., but the figures represent them sinistral, like Triforis.

INDEX AND SYNONYMY.

CERITHIIDÆ.

PAGE.

Abbreviatum (Cerithium), Braz. Linn. Soc. N. S. W. I. p. 316, 1876, ... 145
Abruptum (Cerithium), Watson, Journ. Linn. Soc. xv. 119, 1881, ... 151
Abruptus (Triforis), Dall. Bull. Mus. Comp. Zool. ix. p. 84, 1882. = T. bigemma, Watson, Var. 181
Acicula (Cerithium), Brus. Conch. Dalmat. Ined. p. 17. 1864, = C. tubercularis, Mont. Var. 168
Acicula (Triforis), Issel. Mal. Mar. Rosso. 279, t. 4, f. 3, 1869, 183
Aculeatus (Strombus), Gmel. Syst. Nat. 3523, = Cerithium radula, Linn. 159
Acuminatus (Murex), Pennant. Brit. Anim. = Bittium reticulatum, Da Costa. 150
Acutum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee, V. p. 105, t. 24, f. 27, 1854. = Morus, Var. variegatum. . 134
Acutum (Cerithium), Kien. Coq. Viv. p. 79, t. 32, f. 2. . . 178
Adamsi (Triforis), Desh. Conch. Reunion, p. 100, t. 11, f. 23, 24. 1863. = T. ruber, Hinds. 183
Adansonii (Cerithium), Rve. (not Brug.), Conch. Icon. Sp. 11, 1865. = C. tuberculiferum, Pease. 124
Adenense (Cerithium), Sowb. Reeve. Conch. f. 89, 1865, . . 124
Aduncum (Cerithium), Gould, Boston Proc. iii, f. 119, 1849, 139
Adustum (Cerithium), Kien. Coq. Viv. p. 37, t. 13, f. 2, . . 126
Adversum (Cerithium), Mont. Test. Brit. p. 271, 1803. = Triforis perversus, Linn. Var. 187
Ædonium (Cerithium), Watson, Journ. Linn. Soc. xv. p. 121, 1881. ? = B. pigrum, Watson. 153
Ægle (Mastonia), Jouss. Bull. Soc. Mal. France, Pl. 3, p. 256, t. 4, f. 12, 1884, ... 186
Æmulans (Triforis), Hinds, Ann. and Mag. xl. p. 20, 1843, ... 184, 191
Æmulum (Cerithium), Sowb. Darwin, Geol. obs. on Volcan. Isl. App. p. 153 No. 2. 127
Affinis (Triforis), Hinds, Ann. and Mag. xi. p. 10, 1843, . 191
Affinis (Triforis), Pse. Zool. Proc. p. 434, 1860, = T. Peasei. Jouss. 191
Afrum (Bittium), Danillo & Sandri, Elenco nom. Zara. p. 15, 1856. =B. reticulatum, DaCosta. 150
Agnatus (Strombus), Gmelin, Syst. Nat. Ed. xiii. p. 3523. =Potamides palustris, Linn. 160

Alabastrulum (Bittium), Mörch. Mal. Blatt. xxiii, 101, 1876, ... 158
Alabastrum (Cerithium), Mörch, Mal. Blatt. xxiii. p. 120, 1876, ... 144
Alatus (Tympanotonos), Phil. Abbild. p. 17, t. 1, f. 11, 1849. =Cerithium fluviatile, P. and M. 160
Alba (Cerithiopsis tubercularis, var), Jeffr. Ann. and Mag, ii. p. 129. 1838, ... 168
Albida (Pirenella conica, var.), Monts. Nom. Gen. e Spec. Conch. Medit. f. 122, 1884, ... 165
Albidus (Triforis), A. Ad. Zool. Proc. p, 278, 1851, . . 191
Albina (Cerithium rugulosum, var.), Monts, Nom. Conch. Medit., p. 125, 1884, ... 173
Albina (Cerithium submammillatum, var.), Monts. Nom. Conch. Medit. p. 123, 1884, ... 158
Albina (Cerithium vulgatum, var.), Mts. Bull. Soc. Mal. Ital. V. p. 225, ... 126
Albivaricosa (Cerithidea), A. Ad, Zool. Proc. p. 85, 1854, . 165
Albo-liratum (Cerithium), Carp. Mazatlan Shells, sp. 336, 1857, ... 139
Albo-nodosa (Cerithidea), Carp. Moll. of W. North America, = C. sacrata, Gld. var. 169
Albonodosa (Cerithiopsis tuberculoides, var.), Carp. Mazat. Cat. 443, 1857, ... 162
Albosutura (Cerithiopsis), Tenison-Woods, Roy. Soc. Tasmania, p. 140, 1876, ... 177
Albovittatum (Cerithium), C. B. Ad. Contr. Conch. p. 122, 1850. = Lampania minimus, Gmel. 168
Album (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee, V. p. 101, t. 23, f. 22, 23, 1854. = C. echinatum, Lam. . 124
Algeriamum (Cerithium), Sowb. Thes. Conch. ii. p. 878, f. 230, 231. 1855. = C. lacteum, Phil.. 150
Algicola (Cerithium), C. B. Ad. Bost. Proc. ii. p. 5, 1848, . 129
Alternata (Cerithidea), Hutton, Cat. Mar. Moll. N. Z. p. 26, 1873, ... 165
Alternata (Triforis), Pse. Zool. Proc. p. 434, 1860, = T. Harperi, Jouss. 190
Alternatum (Cerithium), Sowb. Thes. Conch. ii. p. 872, f. 70, 73 & 179. = C. Traillii, Sowb. var. 135
Alternatus (Triforis), C. B. Ad. Pan. Shells, 158, 1852, . . 186
Altum (Cerithium), Sowb. Conch. Icon. f. 126, 1865, . . 156
Alucaster (Cerithium), Scacchi, Cat. Reg. Neap. p. 131, 1836. = C. vulgatum, var. Bourguignati, Locard. 126
Alucaster (Murex), Brocchi, Conch. Foss. Subap. p. 438, t. 10, f. 4, 1814. = Cerithium vulgatum, Brug. 126
Aluco (Cerithium), Born. (not Linn), Mus. Caes. Vindobon. = C. nodulosum, Brug. 122
Aluco (Murex), Linn. Syst. Nat. Edit. xii. p. 1225, = Cerithium, Brug. 145

Aluco (Murex), Marshlius, (not Linn.) Reise, Kœn. Neap. p. 373, 1793. = Cerithium vulgatum, Brug. 125
Alucoides (Cerithium), Brocchi. Cat. Conch. Golfo Arabico. p. 28. = C. Ruppellii, Phil. 124
Alucoides (Murex), Olivi. Zool. Adr. p. 153, 1792. = Cerithium vulgatum, Brug. 125
Alutaceum (Cerithium), Gld. Bost. Proc. vii. p. 387. 1861. . 154
Alveolatus (Triforis), Ad. and Rve. Voy. Samarang p. 45, t. 11, f. 39, a. b. 1850, ... 179
Alveolus (Cerithium), Jacq. Voy. Pol. Sud. v. p. 105, t. 24, f. 28, 29, 1854. = C. piperitum, Sowb. 144
Amabile (Cerithium), Bayle. Journ. de Conch. p. 246, 1880. = Cerithiopsis gracilis, Sowb. 173
Ambigua (Cerithidea), C. B. Ad. Bost. Proc. ii. p. 4, 1848, = C. costata, DaCosta. 164
Amblyterum (Cerithium). Watson. Journ. Linn. Soc. xv. p. 108. 1881, ... 151
Amboynense (Cerithium), Watson. Journ. Linn. Soc. xv. p. 110, 1881, ... 156
Angasi (Cerithiopsis). O. Semper. Cat. v., Mus., Godeffroy. p. 108, No. 6882, 1874, ... 172
Angasi (Triforis), Crosse, Journ. de Conch. p. 46, t. 1, f. 12, 13. 1865, ... 179
Angulifera (Lampania), Sowb. Reeve's Conch. Icon. Sp. 1, 1866, 167
Angustissima (Cerithium vulgatum var.), Weink. Conch. Mittel. ii, p. 154, 1868, ... 126
Angustissimum (Cerithium), Forbes. Rep. Æg. Invert. p. 190, 1843, ... 173
Angustissimus (Triforis). Desh. Conch. Reunion, p. 104, t. 12, f. 1, 12, 1863, ... 182
Angustum (Cerithium), Anton. Verzeich. p. 66, 1839. = C. litteratum, Born. 128
Angustum (Cerithium), Desh. Exped. de Morée, p. 183, t. 24, f. 17, 19, 1832. = Bittium reticulatum, Da Costa. . . 150
Annularis (Murex), Gmel. Syst. Nat. Edit. xiii. = Cerithium torulosum, Linn. 147
Annulatus (Turbo), Martyn. Univ. Conch. = Cerithium torulosum, Linn. 147
Antarcticum (Cerithium), Phil. Abhandl. Nat. Gesch. zu Halle, 1868, ... 144
Antillarum (Cerithium), Dunker, Mörch, Mal. Blatt. xxiii. 113. = C. uncinatum, Gmel. 128
Aphanistylus, Fischer, Mannel de Conch. 682, 1884, . 117, 164
Arctum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v. p. 106, t. 24, f. 37, 38, 1854, ... 155
Armatum (Cerithium), Phil. Zietsch. fur. Malak., p. 22, 1848, 124
Armillatum (Bittium), Cpr. Ann. Mag. p. 276, 1866, . . 158
Arthuri (Triforis), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 221, 1884, ... 180

Articulatus (Vertagus), Ad. and Rve. Voy. Samarang, p. 43, t. 10, f. 14, 1850. = C. gemmatum Hinds. Var. . . 146
Arcticum (Cerithium), Mörch, Prod. Faunæ Moll. Groenl; Arctic Man. p. 127. = C. costulata, Moller. . . . 176
Asper (Murex), Linn. Syst. Nat. Edit. xii, 1226, . . . 148
Aspera (Triforis), Jeffr. Zool. Proc. p. 58, t. 6, f. 7, 7a, 1885. 181
Asperrimus (Triforis), Hinds. Ann. and Mag. xi. p. 18, 1843. 181
Aspersum (Cerithium), Desh. Conch. Reun. p. 97. t. 11, f. 16–18, 1863. = C. Ianthinum, Gld. 137
Asperulum (Cerithium), Tryon. 136
Asperum (Bittium), Gabb. Proc. Phila. Acad. p. 368, 1861; Carp. Ann. Mag. N. Hist. 1866, ... 153
Asperum (Cerithium), Pse. Zool. Proc. p. 433, 1860. = C. aspernlum, Tryon. 136
Assimillata (Cerithiopsis), C. B. Ad. Pan. Shells, 150, 309, . 174
Atalaya (Cerithiopsis), Watson, Journ. Linn. Soc. xix, p. 94, t. 4, f. 9, 9a, 1885, ... 169
Atkinsoni (Cerithiopsis crocea, var.), Tenison-Woods, Roy. Soc. Tasmania, p. 139, 1875, ... 175
Atomus (Triforis), Issel. Mal. Mar Rosso, 280, t. 4, f. 4, 1869, 184
Atra (Pirenella conica, var.), Monts. Nom. Gen. e Spec. Conch. Medit. p. 122, 1884, ... 165
Atratum (Cerithium), Born. Mus. Cæs. p. 324, t. 11, f. 17, 18, 128
Atramentarium (Lampania), A. Ad. Thes. Conch. ii, p. 881, f. 249, 250, 1855, ... 167
Attenuata (Cerithium rupestre, var.), B. D. D. Moll. Rouss. p. 203, t. 23, f. 3, 4, 1884, ... 126
Attenuata (Triforis perversus, var.), Monts. B. D. D. Moll. Roussillon, 212, ... 187
Attenuatum (Bittium), Carp. Journ. de Conch. p. 142, 1865, 153
Attenuatum (Vertagus), Phil. Zeitsch. für Malak., p. 21, 1848, 148
Atterima (Lampania), Dkr. Mal. Blatt. xxiv, p. 70, 1877. = L. zonalis, Brug. var. 167
Audouini (Cerithium), Bayle. Jorn. de Conch. 354, 1880. = C. munitum, Sowb. 129
Aurantiaca (Cerithiopsis), Gld. Bost. Proc. vii, p. 388, 1861, 177
Australe (Cerithium), Quoy, Voy. Astr. iii, p. 131, t. 55, f. 7, 1834, ... 166
Australis (Cerithidea), Gray, (not Lam.), Dieff. New Zealand, ii, p. 341, 1843. = C. subcarinata, Sowb. 163

Baccatum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee. v, p. 102, t. 24, f. 11, 12, 1854. ? = C. Traillii, Sowb. . 135
Baccatum (Cerithium), Costa, Kien. Coq. Viv. t. 23, f. 4. = C. reticulatum, DaCosta, ... 150
Bacillum (Cerithiopsis), Issel. Mar Rosso. p. 151, 1869 . . 174
Baculum (Cerithiopsis), A. Ad. Ann. and Mag. vii, p. 130, 1861, ... 177
Bæticum (Cerithium), Pse. Zool. Proc. p. 433, 1860, . . 143

Baliolina (Cerithium submammallatum, var.), Monts. Nom. Conch. Medit. p. 123, 1884, ... 158
Balteata (Cerithidea). A. Ad. Zool. Proc. p. 84, 1854, . . 165
Balteata (Cerithiopsis), Watson. Journ. Linn. Soc. xv. p. 124 1881, ... 173
Balteatum (Cerithium). Phil. Zeitsch. für Malak. p. 22, 1848, 131
Barleii, (Cerithiopsis), Jeffr. B. C. iv, p. 268; v. p. 217, t. 81, f. 2. = C. tubercularis, var. sublata, Wood. . . . 168
Barleii (Cerithiopsis), Tiberi (not Jeffr.) Bull. Mal. Ital. ii, p. 267, 1869. = C. bilineata, Hoernes. 168
Batillaria, Cantor, Ann. Mag. N. Hist. ix, 488, 1842, . . 118
Bayani (Viriola), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 267, t. 4, f. 20, 1884, ... 122, 189
Bellardia, Mayer. 1870, ... 114
Belli (Triforis perversus, var.), Wood. Crag Moll. Add. Pl. f. 17. = Var. adversa, Montagu. 187
Benoitiana (Triforis), Aradas. Atti Soc. Ital. Sc. Nat. Catania. xii, 549, 1869. = T. perversus, Linn. var. . . . 187
Benoitianum (Cerithium), Monts. Journ. de Conch. p. 275, t. 13, f. 2, 1869. = C. angustissimum, Forbes. 173
Bermudæ (Cerithium), Sowb. Reeve's Conch. Icon. sp. 86, 1865. = C. ferrugineum, var. versicolor. 140
Bezanconia, Bayle. 1884. 114
Bicanaliferum (Cerithium), Braz, Linn. Soc. N. S. W. i, p. 317, 1876, ... 145
Bicarinata (Cerithidea), Gray. Diffenbach's New Zealand, ii, p. 241, 1843, ... 163
Bicolor (Cerithium), C. B. Adams. Bost. Proc. ii, p. 5. 1848, . 158
Bicolor (Cerithium), Homb. and Jacq. Voy. Astr. t. 23, f. 11. = C. citrinum. Sowb. 123
Bicolor (Triforis), Pse. Am. Jour. Conch. iv, 127, 1868, . . 190
Bicolor (Triforis perversus, var.), Mts. B. D. D. Moll. Roussillon. 212, ... 187
Bifasciatum (Bittium reticulatum, var.), B. D. D. Moll. Rouss. p. 215, 1884, ... 151
Bifasciatum (Cerithium), Sowb. Thes. Conch. ii, p. 874, f. 198. 1855. = C. morus, Lam. var. 134
Biforina, Bucq, Dautz, Dollf. Moll. Roussillon, 1884. = Monophorus, Grillo. 122
Bigemma (Cerithium), Watson, Journ. Linn. Soc. xv, p. 101, 1881, ... 180
Bilineata (Cerithiopsis), Hörnes, Czjzek's Erläut zur Geogn. Karte von Wien, p. 21, 1848. = C. tubercularis, Mont. var. 168
Bilix (Triforis), Hinds. Ann. and Mag. xi, p. 17, 1843, . . 179
Billehensti (Cerithium), Petit. Journ. de Conch. p. 265, t. 7, f. 3. 1851. = C. inflatum, Quoy. 132
Bimarginata (Cerithiopsis), C. B. Adams. Panama Shells. No. 195, 1852, ... 177
Bimarginata (Triforis), C. B. Ad. Pan. shells, 151, . . . 190

Bittium (Leach), Gray. Zool. Proc. 154, 1847, . . 150, 115
Bituberculatum (Vertagus), Sowb. Reeve's Conch. Icon. sp. 17, 1865, ... 148
Bizonalis (Cerithiopsis), Jeffr. Zool. Proc. p. 62, t.,6, f. 10, 1885, 176
Blainvilici (Inella), Jouss. Bull. Soc. Mal. France, Pt. 3. p. 244, t. 4, f. 6, 1884, ... 180
Bombayana (Cerithidea), Sowb. Reeve's Conch, Icon. sp. 24, 1866. ? = C. Layardi, A. Ad. 165
Bornii (Cerithium), Sowb. Thes. Conch. ii, p. 869, f. 175, 1855, 133
Bourgnignati (Cerithium), Locard. Ann. Soc. d'Agriculture Lyon, viii, p. 186, 1885. = C. vulgatum, Brug. var. . . 126
Brachytrema, Morris and Lycett. Moll. Great Oolite. 24, 1850, 113
Brazieri (Cerithium), Tryon. 142
Breve (Cerithium), Quoy. Voy. Astrol. iii, 116 to 54, f. 9–12. = C. morus, Lam. 133
Breviculum (Cerithium). Sowb. Genera of Shells. No. 42. f. 1. ? = C. inflatum, Quoy. 132
Brongniarti (Cerithium) Maravigna. Rev. Zool. 326, 1840, . 168
Brotia, H. Adams. Zool. Proc. 150, 1866, ... 116
Brunneus (Triforis). Pse. Zool. Proc. p. 777, 1870, . . 191
Cælatum (Cerithium). (Couth. MS.) Gld. Bost. Proc. iii, p. 123, 1849, ... 172
Cæruleum (Cerithium), Sowb. Thes. Conch. ii, p 866, f. 61, 62, 1855, ... 127
Cailliaudi (Cerithium), Potiez and Mich. Cat. Moll. Douai, t. 31, f. 17, 18. = C. conica, Blainv. 165
Calculiferus (Triforis), Gld. Bost. Proc. vii, p. 389, 1861, . 190
Caledonica (Clava), Jouss. Bull. Soc. Zool. France, p. 191, t. 4, f. 12, 1884, ... 160
Californiæ (Cerithium), Sowb. Reeve's Conch. Icon. sp. 104, 1865. = C. morus, var. variegatum. ; 134
Californica (Cerithium), Hald, Fresh-Water Univ. Moll., cover of No. 1. = C. sacrata, Gould. 162
Campanile, Bayle. 1884, ... 114, 149
Cancellata (Triforis), Hinds. Ann. and Mag. xi, p. 18, 1843. . 189
Cancellatum (Cerithium), H. C. Lea. Amer. Journ. Sci. xlii, p. iii, t. 1. f. 8, 1842, ... 145
Candidus (Triforis), Hinds. Ann. and Mag. xl, p. 21, 1843, . 191
Carbonarium (Cerithium), Sowb. (not Phil.) Conch. Icon. f. 59. = C. morus, Lam, var. 134
Carbonarium (Cerithium), Phil. Zeitsch. für Malak. p. 142. 1848, ... 133
Carinata (Fastigiella), Rve. Zool. Proc. p. 15, 1848, . . 149
Carinatum (Cerithium), E. A. Smith, Zool. Proc. p. 736, t. 75, f. 21, 1871, ... 174
Carteretensis (Triforis), Hinds. Ann. and Mag. xi, p. 20, 1843, 184
Castus (Triforis), Hinds, Ann. and Mag. xl. p. 20. 1843, . 191
Caudatum (Cerithium), Sowb. Thes. Conch. ii, p. 856, f. 71, 72, 1855. = C. atratum, Born. 129

Cecillii (Cerithium), Phil. Zeitsch. für Malak. p. 23, 1849. . 144
Cedo-nulli (Vertagus), Sowb. Thes. Conch. ii, p. 852. f. 38-40, 1855. = C. obeliscus, Brug. 146
Cerea (Cerithiopsis), Carp. Mazat. Cat. 443, 1857, . . . 177
Cereum (Cerithium), Sowb. Thes. Conch. ii, p. 880, f. 244, 245, 1855, ... 175
Cerina (Cerithiopsis) ,A. Ad. Ann. and Mag. vii, p. 130, 1861, 177
Ceritella, Morris and Lycett. Ann. and Mag. N. Hist. vi, 418, 1850, ... 120
Cerithidea, Swainson. Man. Malac. 203, 342, 1840, . 117, 161
Cerithidium, Monts. Nom. Gen. e Spec. Conch. Medit. p. 123. 1884, ... 115, 157
Cerithiella. Verrill. Trans. Conn. Acad. v, 522, 1882. = Lovenella, Sars. 119
Cerithinella, Gemmellaro. Giorn. Sci. Nat. Palermo. xiii, 165, 1878, ... 114
Cerithioderma. Conrad. Jour. Philad. Acad. iv, 295. 1860, . 113
Cerithiolum, Tiberi. Bull. Mal. Ital. ii, 263, 1869. = Bittium, Gray. 115
Cerithiopsis, Forbes and Hanley. Brit. Moll. ii, 367, 1853. 119, 168
Cerithium, Adanson. Hist. Nat. Senegal. 153, 1757, 112, 113, 122
Chaperi (Mastoniæforis), Jouss, Bull. Soc. Mal. France, Pt. 3, p. 243, t. 4, f. 4-5, 1884. 185
Charbonnieri (Cerithidea), Petit. Journ. de Conch. p. 264, t. 7, f. 7, 1851, ... 118, 164
Cincta (Triforis perversus, var.), Monts. B. D. D. Moll. Roussillon, 212, ... 187
Cinctum (Cerithium), Hutton. Cat. Mar. Moll. N. Z. p. 27. = Bittium terebelloides, Martens. 158
Cinctella, Monts. Nom. Conch. Medit. p. 123, 1884. = Seila, A. Adams. 119
Cinerascente (Cerithium), Pallas. Sowb. Thes. Conch. ii, 282. = C. conica, Blainv. 165
Cinereo-flavum (Bittium), Mörch. Mal. Blatt. xxiii, p. 102, 1876, ... 158
Cingulata (Cerithiopsis). A. Ad. Ann. and Mag. vii, p. 130, 1861, ... 176
Cingulata (Triforis), Dkr. Mal. Blatt. vi, p. 236, 1860. = T. Dunkeri, Jouss. 189
Cingulatus (Murex), Gmel. Syst. Nat. Edit. xiii, = Potamides fuscatus, Linn. 159
Cingulatus (Triforis). A. Ad. Zool. Proc. p. 279, 1851, . . 191
Cinguliferum (Cerithium), Pse. Zool. Proc. p. 434, 1860, 144, 186
Circinatum (Cerithium), A. Ad. MSS. Reeve, Icon. sp. 61, 1865, ... 127
Citrina (Cerithium vulgatum, var.), Mts. Bull. Soc. Mal. Ital. v. p. 225, ... 126
Citrinum (Cerithium), Sowb. Thes. Conch. ii, p. 855, t. 179, f. 66, ... 123

Clarkii (Cerithiopsis), Hanley. Sowb. Ill. Ind. Brit. Shells. t, 15, f. 12. = C. tuberculariis, Mont. 168
Clathrata (Cerithiopsis), Angas. Zool.. Proc. p. 16, t. 1, f. 12, 1871. = C. Angasi, O. Semper. 173
Clathratum (Cerithium), A. Ad. Thes. Conch. ii, p. 883, f. 258, 1855. = C. sinon, Bayle. 1880. 166
Clathratum (Cerithium), Mke. Synopsis. p. 32, 1826. = C. minimum, Gmel. 168
Clathratus (Triforis), Gld. Bost. Proc. vii, p. 389, 1861, . 190
Clava, Mart. (in part), Jousseaume, Bull. Soc. Zool. France, 190, 1884. = Terebralia, Mart. in part. 116
Clava (Cerithium), Brug. Enc. Meth. p. 479. = C. maculosum, Martyn. 145
Clava (Cerithium), Sowb. Genera of Shells. = C. Sowerbyi, Kien. 145
Clavata (Triforis), Pse. Zool. Proc. p. 434. 1860. 191
Clavula (Cerithiopsis), A. Ad. Ann. and Mag. vii, p. 130, 1861, ... 177
Clemens (Triforis), Hinds. Ann. and Mag. xi, p. 20, 1843, . 183
Cnodax (Mastonia), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 260, t. 4. f. 14, 1884, ... 185
Cœlebs (Triforis), Hinds. Ann. and Mag. xi, p. 20, 1843. . 191
Coarctata (Cerithium), Sowb. H. Adams. Zool, Proc. 308. 1867. = C. gracile, H. Ad. 142
Colina, H. and A. Adams. Gen. Rec. Moll. i, 286, 1853, 113, . 141
Collaris (Triforis), Hinds. Zool. Proc. p. 23, 1843, . . 191
Colon (Triforis), Dall. Bull. Mus. Comp. Zool. ix, p. 86, 1882, 191
Columellare (Cerithium), d'Orb. Moll. de Cuba. ii, p. 155, t. 23, f. 13-15, 1853. = C. pallidum, Pfr. 152
Columna (Cerithiopsis), Carp. Ann. Mag. N. Hist. 3 Ser. xiv, 1864, ... 171
Columna (Cerithium), Sowb. Gen. of Shells. No. 42. f. 7, . 123
Concinnus (Triforis), Hinds. Ann. and Mag. xi, p. 20, 1843, . 184
Concisum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee. v. p. 102, t. 24, f. 12, 1854. = C. morus, Lam. . . . 134
Concolor (Lampana Cumingii, var.), Schrenck. Amur. Moll. p. 314, 1859-1867, ... 166
Concors (Triforis), Hinds. Ann and Mag. xi, p. 17, 1843, . 178
Conicum (Cerithium), Anton. Verzeich. p. 65, 1839, . . 144
Conicum (Cerithium), Blainv. Faune Franc. Moll. p. 158, t. 6 a, f. 10, 1826, ... 163, 165
Connatum (Cerithium), Montr. Journ. de Conch. p. 236, t. 9, f. 4, 1862, ... 189
Conspersus (Triforis), A. Ad. MS. E. A. Smith. Ann. and Mag. xvi, p. 106, 1875, ... 190
Contigua (Cerithiopsis), Monts. Journ. de Conch. xxvi, p. 156, 1878, ... 176
Contractum (Cerithium), Sowb. Thes. Conch. ii, p. 877, f. 218, 1855. = C. crumena, Bayle. 141

Conulus (Cerithium), Anton. Verzeich. p, 64, 1839, . . 144
Convexa (Cerithiopsis), Carp. Mazat. Cat. 444, 1857. . . 172
Coppolæ (Cerithiopsis), Aradas. 1868.
= C. bilineata, Hörnes. 168
Corallinum (Cerithium), Sowb. Thes. Conch. sp. 59, . . 125
Cordigerum (Cerithium), Bayle. Journ. de Conch. p. 249, 1880, ... 146
Cornea (Cerithidea), A. Ad. Zool. Proc. p. 85, 1854, . . 162
Corneum (Cerithium), Kien. Coq. Viv. p. 91, t. 32, f. 3. . . 168
Corona (Cerithiopsis), Watson MSS. Monts. Enum. e Sin. p. 39. = C. diadema, Watson. 169
Coronatum (Cerithium), Sowb. Thes. Conch. ii, p. 863, f. 118, 1855. = C. custos, Bayle. 131
Coronatus (Murex), Born. Test. Mus. Vind. p. 322.
= C. aluco, Linn. 145
Corrugatus (Triforis), Hinds. Ann. and Mag. xi, p. 18, 1843, ... 122, 189
Costata (Cerithidea). A. Ad. Zool. Proc. p. 86, 1854.
= C. macrostoma, Hinds. 142
Costata (Cerithidea), Da Costa. Brit. Conch. 118, t. 8, f. 14, . 164
Costatus (Triforis), Pse. Zool. Proc. p. 775, 1870, . . . 191
Costellifer, Meek. Am. Jour. Sci. xxxv, 88, 1863.
? = C. Tubifer, Piette. 120
Costiferum (Cerithium), A. Ad. Thes. Conch. ii, t. 184, f. 222.
= C. macrostoma, Hinds. 142
Costulata (Cerithiopsis), Moller. Ind. Moll. Grœnl. p. 10, . 176
Costulatum (Cerithium), Costa.
= C. reticulatum, Da Costa. 150
Costulatus (Cerithiopsis), Whiteaves (not Möller).
= Cerithiella Whiteavesi, Verrill. 176
Crassilabrum (Cerithidea), A. Ad. Zool. Proc. p. 84, 1854, . 165
Crassilabrum (Cerithium), Krauss. Ind. Moll. t. vi, f. 10, . 141
Crassula (Triforis), Martens. Mobius, Mauritius, p. 282, t. 22, f. 1, 1880. = T. atomus, Issel. 184
Crassum (Cerithium), Lam. Anim. sans Vert. ix, p. 294.
= C. palustris, Linn. 160
Craticulatum (Bittium), Gld. Bost. Proc. vii, p. 387, 1861, . 158
Crenulatus (Triforis), Desh. Conch. Reunion, p. 99, t. 11, f. 21, 22, 1863, ... 184
Crocea (Bittium cinereo-flavum, var.), Mörch. Mal. Blatt. xxiii, p. 102, 1876, ... 158
Crocea (Cerithiopsis), Angas. Zool. Proc. p. 16, t. 1, f. 13, 1871, 175
Crosseanum (Cerithium), Tiberi. Journ. de Conch. p. 160, t. 6, f. 2, 1863. = C. Metaxae, Delle Chiaje. 173
Crossei (Cerithium), Desh. Conch. Reunion, p. 96, t. 11, f 12, 14, 1863. = C. Maillardi, Crosse. 137
Crumena (Cerithium), Bayle. Journ. de Conch. p. 243, 1880.
= C. pingue, A. Ad. 141

Coystallina (Cerithiopsis), Dall. Bull. Mus. Comp. Zool. ix, p. 89, 1882, ... 177
Cucullatus (Triforis), Folin. Les. Meleagrinicoles, p. 72, t. 6 f. 13, 1867. = T. alternatus, C. B. Ad. 186
Cumingii (Lampania), Crosse. Journ. de Conch. p. 54, t. 1, f. 10, 11, 1862, ... 166
Cumingii (Lampania). Reeve. Conch. Icon.
= L. multiformis, Lischke. 167
Cumingii (Vertagus), A. Ad. Thes. Conch. ii, p. 850, f. 19, 1855. = V. Sowerbyi, Kiener, var. 145
Curta (Lampania), Sowb. Thes. Conch. ii, p. 869, f. 153, 154, 1855, ... 142
Custos (Cerithium), Bayle. Journ. de Conch. p. 244, 1880, . 131
Cylindraceum (Cerithium), Pse. Amer. Journ. Conch. v, p. 77, 1869. 141
Cylindrata (Triforis perversus var.), Mts. B. D. D. Moll. Roussillon, 211, ... 187
Cylindratum (Cerithium), Jeffr. Zool. Proc. p. 55, t. 6, f. 5, 5a, 1885, ... 175
Cylindrellus (Triforis), Dall. Bull. Mus. Comp. Zool. ix, p. 83, 1882. = T. bigemma, Watson. 181
Cylindricum (Cerithium), Watson, Journ. Linn. Soc. xv, p. 118, 1881, ... 156
Cylindricus (Triforis), Pse. Zool. Proc. p. 776, 1870, . . 191

Danicum (Cerithium), Beck,
= Bittium reticulatum, Da Costa. 150
Danielseni (Cerithium), Friele, Prelim. Report on Mollusca p. 3. = Procerum, Friele. 176
Dealbatum (Cerithium), C. B. Ad. Centr. Conch. p. 117, 1850, 191
Decollata (Cerithidea), Linn. Syst. Nat. Edit. xii, p. 1226, 117, 161
Decollatum (Cerithium), Sowb. Genera of Shells,
= C. obtusum, Lam. 161
Decoratus (Triforis), C. B. Adams, Contrib. Conch. 117, 1850, 182
Decussata (Cerithiopsis), Carp. Mazat. Cat. 445, 1857, . . 177
Deforme (Cerithium), Eichw. Zool. Specialis. i, p. 295, t. 5, f. 11, 1829. = C. ferrugineum, Brug. 150, 191
Delectum (Cerithium), A. Ad. Sowb. Thes. Conch. ii, 875, 1855. = C. zebrum, Kr. 138
Delicatum (Cerithium), Watson, Journ. Linn. Soc. xv, p. 120, 1881, ... 154
Desolatum (Cerithium), Bayle. Journ. de Conch. p. 247, 1880. = Lampanella minimus, Gmel. 168
Destrugesi (Cerithium), Folin. Les Meleagrinicoles, p. 71, t. 6, f. 12, 1867, ... 172
Dextroversus (Triforis), Ads. and Reeve. Voy. Samarang. 45, 1850, ... 119, 122, 175, 190
Diadem (Cerithiopsis), (Watson, MS.), Monts. Journ. de Conch. p. 273, 1874; Jour. Linn. Soc. xix, 93, ... 169

Dialeucum (Cerithium), Phil. Abbild. t. 1, f. 5, 1849, . . 130
Diastoma, Desh. Traite. Conch. 46, 1848, ... 118
Diemenense (Cerithium), Quoy. Voy. Astr. iii, p. 128, t. 55, f. 11, 13, 1834, ... 166
Diminutivum (Cerithium), Phil. Archiv. fur Natur. p. 67, 1845, ... 138
Diplax (Bittium), Watson, Challenger, Exp. xv, p. 555, t. 38, f. 4, 1886, ... 156
Dislocatum (Cerithium), Say. Journ. Philada. Acad. ii, p. 236, 1822. = Terebra Petiti, Kiener. 145
Distinctus (Triforis), Desh. Conch. Reunion, p. 103, t. 11, f. 30, 31, 1863. = T. ruber, Hinds. 183
Distinguenda (Triforis), Dkr. 1881, Jouss, Bull. Soc. Mal. Pr. 227, 1884, ... 190
Ditretus, Piette, Compt. rend. Assoc. Franc. 1875, . . . 117
Dolicha (Triforis), Watson, Challenger Exp. xv, p. 565, t. 42, f. 1, ... 178
Doliolum (Cerithium), Weink. Conch. Mittel. ii, p. 157, 1868, = C. rupestre, Risso. 126
Dorsuosum (Cerithium), A. Ad. Thes. Conch. ii, p. 867, f. 138, 140, 1855. = C. aduncum, Gld. 139
Dorsuosum (Cerithium), Menke. Zeitsch. fur Malac. p. 60, 1844, ... 144
Douvillei (Triforis), Jouss. Bull. Soc. Mal. France. Pt. 3, f. 241, t. 4, f. 3, 1884, ... 180
Dubium (Cerithium), Sowb. Thes. Conch. ii, p. 864, f. 120, 1855. = C. eludens, Bayle. 136
Ducosensis (Mastonia), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 251, t. 4, f. 10, 1884. = T. violaceus, Quoy. . . . 182
Dunkeri (Triforis), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 222, 1884, ... 189

Ebeneum (Cerithium), Brug. Enc. Meth. t. 442, f. 1, a. b. = P. ebeninus, Brug. 158
Ebeninus (Cerithium), Brug. Dict. No. 26, . . . 116, 158
Eburneum (Cerithium), Brug. 128, 129
Echinatum (Cerithium), Kien. Coq. Viv. 7, t. 3, f. 1. = C. columna, Sowb. 123
Echinatum (Cerithium), Lam. Anim. sans Vert. sp. 12, . 123
Ecostata (Cerithium submammillatum, var.), Monts. Nom. Conch. Medit. p. 123, 1884, ... 158
Egenum (Cerithium), Gld. Bost. Proc. iii, p. 120, 1849, . . 137
Elegans (Bittium), Petit. (not Blainv.), Journ. de Conch. iv, p. 431, 1853. = B. lacteum, Phil. 150
Elegans (Cerithium), Blainv. Faune Franc. Moll. p. 159, t. 62, f. 9, = C. punctatum, Linn. 170
Elegans (Triforis), Hinds. Ann. and Mag. xi, p. 18, 1843, . 189
Elongatum (Cerithium), Anton. Verzeich. p. 66, 1839, . . 144
Elongatum (Cerithium), Sowb. Thes. Conch. ii, p. 878, t. 84, f. 233, 234, 1855. = C. reticulatum, Da Costa. . . . 150

Eludens (Cerithium), Bayle. Journ. de Conch. p. 245, 1880, . 136
Emmersonii (Cerithium), C. B. Ad. Bost. Journ. xv, p. 284, t. 4, f. 10. = C. punctatum, Linn. 170
Enode (Cerithium), Watson, Journ. Linn. Soc. xv, p. 115, 1881, 152
Episcopale (Cerithium), Anton. Verzeich. p. 66, 1839, . . 144
Eriense (Cerithium), Valenciennes. Kiener, t. 24, f. 1. = C. versicolor, Ad. Var. 140
Erythræonense (Cerithium), Lam. Anim. sans Vert. p. 292, . 123
Escoffieria, Fontannes. 1880, ... 118
Esuriens (Bittium), Carp. Jour. de Conch. p. 142, 1865, . 153
Eumeta, Mörch, 1868, Jeffreys, Zool. Proc. 61, 1885. = Cerithiopsis, Forbes and Hanley, Section. . . 120, 176
Eurus (Cerithium), Bayle. Jour. de Conch. p. 244, 1880. . 142
Euryptera (Tympanotonos), A. Ad. Reeve's Iconica. Tymp. sp. 8, 1866. = P. fluviatilis, Pot. and Mich. . . . 160
Eustoma, Piette. Bull. Soc. Geol. France 2d. Ser. xii, 1107, 1855, ... 120
Euthymia, Jousseaume, Bull. Soc. Mal. France. Pt. 3, p. 237, 1884. = Triforis, Desh. 122
Exelissa, Piette. Bull. Soc. Geol. France, xviii, 14, 1860, . 119
Exigua (Bittium reticulatum, var.), Monts. B. D. D. Moll. Rouss. 215, t. 25. f. 26, 27, ... 151
Exiguum (Cerithium), Phil. Archiv. fur Naturg. i, p. 67, 1845, ... 144, 191
Exile (Bittium), Hutton. Cat. Mar. Moll. N. Z. p. 27, 1873, . 158
Exile (Cerithium), C. B. Ad. Contr. Conch. p. 120, 1850, . 158
Exile (Cerithium), Eichw. Zool. Specialis, i, p. 295, t. 5, f. 10, 1829. = C. ferrugineum, Brug. 150, 191
Exilis (Triforis), Dkr. Mal. Blatt. vi, p. 237, . . . 187
Exilissima (Cerithium rugulosum, var.) Monts. Nom. Conch. Medit. p. 125, 1884, ... 173
Eximium (Cerithium), Sowb. Thes. Conch. ii, p. 873, f. 192, 1855. = C. rubus, Martyn. 132
Famelicum (Cerithium), C. B. Ad. Shells of Panama, p. 152. ? = C. uncinatum, Gmel. 128
Fasciata (Pirenella conica, var.), Monts. Nom. Gen. e Spec. Conch. Medit. p. 122, 1884, ... , 165
Fasciata (Triforis), Tenison-Woods, Roy. Soc. Tasmania, p. 34. 1878. 190
Fasciatum (Cerithium), Brug. Enc. Meth. p. 474, . . . 149
Fastigiatum (Bittium), Carp. Ann. Mag. N. Hist. xv, 177, 1865, ... 158
Fastigiella, Reeve. Zool. Proc. 14, 1848, . . . 115, 149
Fayalensis (Cerithiopsis), Watson. Journ. Linn. Soc. xv, p. 125, 1881. = C. diadema, Watson. 169
Fenestratum (Cerithium), Sowb. Thes. Conch. ii, p. 860, f. 100, 1855. = C. eburneum, Brug. 129
Ferrugineum (Cerithium), Middendorff. (not Brug.) Malac. Mar. Rosso. p. 49, 1849. = Bittium reticulatum, Da Costa. 150

Ferrugineum (Cerithium), Say. Amer. Conch. v, t. 49, f. 2, 1832, ... 140
Ferrugineum (Cerithium), Sowb. Thes. Conch. f. 177. = C. veriscolor, C. Bad. 140
Festivus (Triforis), A. Ad. Zool. Proc. p. 278, 1851, . . 191
Fibula (Cerithiopsis), Jeffr. Zool. Proc. p. 60, 1885. = C. diadema, Watson. 169
Fibula, Piette. Bull. Soc. Geol. France, xiv, 1857, . . 120
Filosum (Cerithium), Gld. Bost. Proc. iii, p. 120, 1849, . 152
Filosum (Cerithium), Phil. Zeitsch. fur Malak. p. 143, 1848, . 144
Filosum (Cerithium), Sowb. Reeve, Conch. Icon. sp. 82, 1865, 125
Flammiculatum (Cerithium), Sowb. Thes. Conch. ii, p. 875, f. 206, 1855, ... 139
Flammulata (Triforis), Pse. Zool. Proc. p. 434, 1860, . . 191
Flava (Cerithium rugulosum, var.), Monts. Nom. Conch. Medit. p. 125, 1884, ... 173
Flavum (Cerithium), C. B. Ad. Contr. Conch. p. 122, 1850, . 170
Floridanum (Cerithium), Mörch. Mal. Blatt. xxiii, p. 114, 1876. ? = C. atratum, Born. 129
Fluviatile (Cerithium), Potiez and Michaud. Cat. Moll. de Douai, p. 363, t. 31, f. 19, 20, ... 159
Fluviatilis (Murex), Gmel. Syst. Nat. 3562. = Cerithium radula, Brug. 159
Formosus (Triforis), Desh. Conch. Reunion p. 102, t. 11, f. 29, 1863, ... 179
Fortior (Cerithiopsis), Cpr. Ann and Mag. xv, p. 397, 1865, . 177
Fortiusculum (Cerithium), Bayle. Journ. de Conch. p. 250, 1880. = C. Montagnei, Orb. var. pulchra. . . . 161
Fortunei (Cerithidea). A. Ad. Zool. Proc. p. 85, 1854, . . 162
Fragile (Cerithium), Anton, Verzeich. p. 65, 1839, . . 144
Fucatum (Cerithium), Pse. Zool. Proc. p. 432, 1860, . . 138
Fulva (Cerithium rugulosum, var.), Monts. Nom. Conch. Medit. p. 125, 1884, ... 173
Fulvum (Cerithium), Anton, Verzeich, p. 95, 1839. . . 144
Funebris (Mastonia), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 262, t. 4, f. 15, 1884, ... 186
Furvum (Bittium), Watson, Challenger Exped. xv, p. 556, t. 38, f. 5, 1886, ... 157
Fusca (Pirenella conica, var.), Monts, Nom. Gen. e Spec. Conch. Medit. p. 122, 1884, ... 165
Fusca (Triforis), Dunker. Mal. Blatt. vi, p. 237, 1860, . . 180
Fuscatum (Cerithium), Costa (and authors), Cat. Sist. p. 154, 1826. = C. rupestre, Risso. 126
Fuscatus (Murex), Linn. Syst. Nat. Edit. xii, p. 755 . . 159
Fuscum (Cerithium), Dkr. Mal. Blatt. xviii, p. 152, 1871, . 144
Fuscum (Telescopium), Schumacker, Essai Nouv. Syst. 233, 161
Fuscus (Strombus), Gmel. Syst. Nat. Edit. xiii, 3523, = Cerithium sulcatum, Brug. 160
Fusiforme (Cerithium), C. B. Ad. Contr. Conch. p. 120, 1850, 177

Fusiforme (Cerithium), Sowb. Thes. Conch. ii, p. 862, f. 106, 107, 1855. = C. proditum, Bayle. 130
Galactis (Bittium), Mörch. Mal. Blatt. xxiii, p. 95, 1876, . 158
Gallapaginis (Lampania), A. Ad. Thes. Conch. ii, p. 869, f. 155, 156, 1855. = C. interruptum, Menke, Var. 143
Gemma (Cerithium), Sowb. Thes. Conch. ii, p. 873, f. 51, 1855, = C. morus, Var. variegatam, Quoy. 134
Gemmatum (Cerithium), Watson, Journ. Linn. Soc. xv, p. 113, 1881, ... 150
Gemmatus (Vertagus), Hinds. Voy. Sulph. p. 27, t. 11, f. 5, 6. 1844, ... 146
Gemmulatum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee. v, p. 102, t. 24, f. 34, 7-10, 39-41, 1854. = C. morus, Lam. 134
Gemmulatus (Triforis), Ad. and Rve. Voy. Samarang. p. 46, t. 11, f. 34, a. b. 1850, ... 181
Gemmuliferum (Cerithium), E. A. Smith, Zool. Proc. p. 736, t. 75, f. 22, 1871, ... 170
Gemmulosum (Cerithium), C. B. Ad. Contr. Conch. p. 119, 1850, ... 158
Gentile (Cerithium), Bayle. Journ. de Conch. p. 248, 1880. = C. Traillii, Sowb. 135
Georgianum (Cerithium), Pfeffer. Natur. Mus. Hamburg, p. 97, t. 2, f. 7, 1886, ... 154
Gibberosum (Cerithium), Dkr. Verhandl. Zool. Botan. Vereins. Vienna, xvi, p. 911, 1866, ... 144
Gibberosum (Cerithium), Frauen. Voy. Novara. ii, Pt. 3, p. 7, t. 1, f. 7, 1868. = C. patulum, Sowb. 133
Gibberulum (Cerithium), C. B. Ad. Bost. Proc. ii, p. 5, 1848. = C. varium, Pfr. 152
Giganteum (Cerithium), Lam, Kien. Coq. Viv. t. 11, . . 145
Gigas (Triforis), Hinds. Ann. Mag. Nat. Hist. xi, p. 17, 1843, Voy. Sulph. p. 28, t. 8, f. 1, ... 178
Glabratum (Cerithium), Phil. Zeitsch. fur Malak. p. 66, 1851, ... 144
Glariosum (Cerithium), Gld. Bost. Proc. vii, p. 387, 1861, . 155
Goumier (Cerithium), Adan. Voy. Senegal. p. 156, t. 10, f. 3, 1757. = C. vulgatum, Brug. 125
Gourmya, Bayle. 1884, ... 117
Gourmyi (Cerithium), Crosse, Journ. de Conch. p. 171, t. 6, f. 1, 2, 1861, ... 160
Gracile (Cerithium), Anton. Verzeich. p. 64, 1839, . . 144
Gracile (Cerithium), Jeffr. Zool. Proc. p. 54, t. 6, f. 3, 3a. 1885. = Bittium amblyterum, Watson. 151
Gracile (Cerithium), Pse. Zool. Proc. p. 432, 1860. = C. rostratum, Sowb. 130
Gracile (Cerithium), Sowb. Thes. Conch. ii, p. 879, f. 228, 229, 1855, ... 173

Gracilentum (Cerithium), Migh. Bost. Proc. ii, p. 22, 1861, . 145
Graciliforme (Cerithium), Sowb. Reeve. Conch. Icon. sp. 49, 1865. = C. eburneum, Brug. 129
Gracilis (Cerithium vulgatum, var.), Phil. Moll. Sicil i, p. 193, t. 9, f. 5. = Var. protractum, Bivona. 126
Gracilis (Colina), H. Ad. Zool. Proc. p. 150, 1866; 308, 1867, ... 142
Gracilis (Triforis), Pse. Proc. p. 774, 1870, ... 191
Gracilis (Triforis), Pse. Zool. Proc. p. 777, 1870.
Preoccupied by the same author on p. 774, of the same book. = T. Kauainus, Jouss. 190
Gracillimum (Cerithium), Sowb. Conch. Icon. sp. 138, 1865. . 172
Granarium (Cerithium), Kien. Coq. Viv. p. 72, t. 19, f. 3, . 155
Graniferus (Vertagus), Pse. Zool. Proc. p. 433, 1860, . . 147
Graniferus (Vertagus), Reeve, Conch. Icon. sp. 6, 1865, (not Pease). = V. ravidum, Phil. 132
Granosum (Cerithium), Kien. Coq. Viv. p. 57, t. 4, f. 3. = C. rubus, Mart. 177
Granosum (Cerithium), S. Wood. Crag. Moll. 73, 1848, . . 197
Granosus (Triforis), Pse. Zool. Proc. p. 776, 1870, . . 147
Granulatum (Cerithium), Brug. Enc. Meth. t. 442, f. 4. = P. radula, Linn. 159
Granulatum (Cerithium), Costa. = C. reticulatum, Da Costa. 150
Granulatus (Murex), Linn. (not Brug.) Edit. xii, 1226. = Vertagus asper, Linn. 148
Granulatus (Triforis), Ad. and Rve. Voy. Samarang. p. 46, t. 11, f. 33. a. b. 1850, ... 183
Granulifera (Triforis), Dkr. Jouss. Bull. Soc. Mal. Fr. 227, 1884, ... 190
Granulosum (Cerithium), Anton. Verzeich. p. 64, 1839, . . 144
Granulosum (Cerithium), Risso. Europe Merid., iv, p. 157, 1826. = C. reticulatum, Da Costa. 150
Granulosum (Cerithium), Scacchi. Cat. Reg. Neap. p. 13, 1836. = Triforis perversus, Linn. 187
Grayi (Triforis), Hinds. Ann. and Mag. xi, p. 19, 1843, . 191
Greenii (Cerithiopsis), C. B. Ad. Bost. Journ. ii, p. 287, t. 4, f. 12, ... 170
Grisea (Cerithium versicolor, var.), Mörch. Mal. Blatt. xxiii, p. 117, 1876, ... 140
Guaranianum (Cerithium), d'Orb. Voy. Amer. Merid. v, p. 443, t. 77, f. 11, 12, ... 171
Guiniacum (Cerithium), Phil. Abbild. p. 17, t. 1, f. 13, 1849, . 127
Hanleyana (Cerithiella), Monts. Nom. Conch. Medit. p. 123, 1884, ... 176
Hanleyi (Cerithidea), Sowb. Thes. Conch. ii, p. 874, f. 193, 1855. ? = C. iostoma, Pfr. var. 135, 164
Harperi (Triforis), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 222, 1884, ... 190

Hebes (Cerithium), Watson. Journ. Linn. Soc. xv, p. 103, 1881, ... 181
Hegwischii (Cerithidea), Phil. Zeitsch. fur Malak. p. 19, 1841, = C. Montagnei, Orb. var. 161
Henkelinsii (Cerithium), Nyst. = C. tubercularis, Mont. 168
Heteroclytes (Cerithium), Lam. Anim. sans. Vert. ix, p. 299. = C. minimum, Gmelin. (mouster). 168
Hilaris (Triforis), Hinds. Ann. and Mag. xi, p. 21, 1843, . 190
Hindsii (Triforis), Desh. Conch. Reunion. p. 98, t. 11, f. 19, 20, 1863, ... 179
Hircus (Triforis), Dall. Bull. Mus. Comp. Zool. ix, p. 83, 1882, ... 191
Hirta (Cerithium vulgatum, var.), B. D. D. Moll. Rouss. p. 201, t. 22, f. 13, 1884, ... 126
Homologum (Cerithium), Bayle. Journ. de Conch. p. 248, 1880, ... 159
Horrida (Cerithiopsis), Jeffr. p. 60, t. 6, f. 9, 9a. 1885, . 170
Humboldti (Cerithium), Valen. Rec. d'Obs. Zool. ii, p. 280, 1833. = C. pacificum, Sowb. 158
Humile (Cerithium), Dkr. Moll. Japan. p. 9, t. 2, f. 17, 1861. ? = C. morus, var. variegatum. 134
Hymerensis (Cerithium), Calcar. Monog. Claus. e Bul. etc. 49, 1840. = C. brongniarti, Marav. 168
Ianthina (Triforis), Dkr. 1881, Jouss. Bull. Soc. Mal. Fr. 227, 1884, ... 190
Ianthinum (Cerithium), Gld. Bost. Proc. iii, p. 121, 1849, . 137
Ibex (Triforis), Dall. Bull. Mus. Comp. Zool. ix, p. 86, 1882, . 191
Icarus (Cerithium), Bayle. Journ. de Conch. p. 249, 1880, . 138
Incisa (Lampania), Sowb. Thes. Conch. ii, p. 868, f. 152, 1855, 142
Incisum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée, v, p. 97, t. 23, f. 8, 9, 1854. = P. fluviatilis, Pot. et Mich. . 160
Incisus (Triforis), Pse. Zool. Proc. p. 434, 1860; Am. Jour. Conch. vii, 25, ... 190
Indicator (Telescopium), Mtf. Conch. Syst. = Cerithium telescopium, Linn. 161
Inella, Bayle. Jour. de Conch. xxvii, 35, 1878. = Ino, Hinds. 122
Inflatum (Cerithium), Quoy. Voy. Astr. iii, p. 130, t. 55, f. 10, 1834, ... 132
Inflatum (Cerithium), Watson. Journ. Linn. Soc. xv, p. 103, 1881, ... 181
Infrequens (Triforis), C. B. Ad. Pan. Shells. 159, 310, . . 190
Iniforis, Jouss. Bull. Soc. Mat. France. Pt. 3, p. 235, 1884. = Ino, Hinds. 122
Ino, Hinds. Voy. Sulphur. Zoology, 28, 1844, . . . 122
Inscriptum (Cerithium), Monts. Nom. Gen. e spec. Medit. p. 119, 1884. = C. vulgatum, Brug. var. 126

Insculptum (Cerithium), Sowb. Conch. Icon. sp. 128, 1865.
= C. Lawleyanum, Crosse. 155
Insignis (Stilus), Jeffr. Zool. Proc. p. 52, t. 6, f. 1-1b. 1885, . 144
Intercalaris (Cerithiopsis), Carp. Zool. Proc. p. 281, 1865, . 177
Intercalaris (Triforis), Gld. Bost. Proc. vii, p. 388, 1861, . 190
Interfilatus (Triforis), Gld. Bost. Proc. vii, p. 388, 1861, . 190
Intermedia (Cerithium), Weink. Conch. Mittelm. 1868.
= C. vulgatum, var. tuberculatum, Phil. 126
Intermedium (Cerithium), C. B. Ad. Contr. Conch. p. 119, 1850, ... 188
Intermedius (Triforis), Dall. Bull. Mus. Comp. Zool. ix, p. 85, 1882, ... 191
Interruptum (Cerithium), Krebs. Cat. p. 48.
= C. terebrale, C. B. Ad. 174
Interruptum (Cerithium), Menke. Zeitsch. fur Malak. p. 178, 1850, ... 174, 143
Interstriatum (Cerithium), Sowb. Thes. Conch. ii, p. 876, f. 216, 1855, ... 138
Invaginatum (Cerithium), Gld. Boston Proc. iii, p. 120, 1849.
= C. planum, Phil. 131
Inversum (Cerithium), Costa. Cat. p. 84, no. 26, 1829.
= Triforis perversus, Linn. 187
Iostoma (Cerithidea), Pfr. Archiv fur Naturg. i, p. 357, 1839, 164
Iota (Cerithium), C. B. Ad. Bost. Proc. ii, p. 5, 1848.
?= B. nigrum, Totten. 152
Irregulare (Cerithium), Anton. Verzeich. p. 65, 1839, . . 144
Irroratum (Cerithium), Gould. Bost. Proc. iii, p. 119, 1849.
= C. ocellatum, Brug. 132
Isleanus (Triforis), Velain. Comptes Rendus July 24th., p. 285, 1876, ... 180
Isselii (Cerithium), Pagenstecher. Kossman's Reise in Roth. Meer. p. 44, 1877, ... 137

Jadertinum (Bittium), Brus. Conch. Dalm. Ined. p. 16, 1865.
= B. reticulatum, Da Costa. var. 151
Janellii (Cerithium), Hombr. et Jacq. Astr. et Zel. t. 24, f. 19-21. = C. tuberculatum, Linn. 133
Johnstoni (Cerithiopsis), Petterd. Journ. of Conch. iv, p. 142, 1883, ... 177

Kanoni (Cerithium), Folin. Les Meleagrinicoles, p. 70, t. 6, f. 11, 1867, ... 174
Kauainus (Triforis), Jouss. Bull. Soc. Mal. France, 224, 1884, 190
Kieneri (Cerithidea), Hombron and Jacq. Voy. Astr. and Zelée, v, p. 96, t. 23, f. 4, 5, 1854. = C. obtusa, Lam. var. . . 161
Kirki (Cerithium), Hutton, Cat. Mar. Moll. N. Z. p. 27, 1873,
= C. terebelloides, Martens. 158
Kobelti (Cerithium), Dkr. Mal. Blatt. xxiv, p. 67, 1877, . 137
Kochii (Vertagus), Phil. Zeitsch. fur Malak. p. 21, 1848, . 147

Labiatus (Triforis), A. Ad. Zool. Proc. p. 279, 1851, . . 190
Lacertinum (Cerithium), Gld. Bost. Proc. vii, p. 386, 1861, . 155
Laciniosum (Cerithium), Migh. Bost. Proc. ii, p. 23, 1848, . 145
Lactea (Triforis), Dkr. 1881, Jouss. Bull. Mal. France. 227, 1884, ... 190
Lactea (Triforis perversus, var.), Monts. B. D. D. Moll. Rousillon, 212, ... 187
Lactescens (Bittium reticulatum, var.) Jeffr. 151
Lacteum (Cerithium), Kien. Coq. Viv. p. 58, t. 7, f. 3, . 143
Lacteum (Cerithiolum), Ph. Enum. Moll. Sicil. i, p. 195, 1836, 150
Læocochlis, Dunker and Metzger. Nachr. Mal. Gesell. 7, 1874, ... 120, 177
Læve (Cerithium), Quoy. Voy. Astr. iii, p. 106, t. 54, f. 1–3, 1834, ... 149
Lævigatum (Cerithium), Phil. Enum. Moll. Sicil. ii, p. 161, t. 25, f. 32, 1844. = Lampanella minimus, Gmel. . . 168
Lafondi (Cerithidea), Sowb. Conch. Icon. (not Kiener or Mich.) = C. scalariformis, Say. 163
Lafondi (Cerithium), Michaud. Actes Linn. Soc. Bordeaux, t. 5, f. 7, 8, 1829. = C. iostoma, Pfr. 164
Lamarckii (Cerithium), Valenc. Kiener Icon. Cerithium, 84, ... 159
Lampanella, Mörch. Mal. Blatt. 93, 1876, . . . 118, 167
Lampania, Gray. Syn. Brit. Mus. 90, 1801, . . . 118, 166
Laqueata (Cerithiopsis), Gld. Bost. Proc. vii, p. 387, 1861, . 177
Largillierti (Cerithidea), Phil. Zeitsch. fur Malak. p. 20, 1848. = C. montagnei, d'Orb. 161
Latreillei (Cerithium), Payr. Moll. Corse. p. 143, t. 7, f. 9, 10, 1826. = C. reticulatum, DaCosta. var. 151
Latum (Cerithium), C. B. Ad. Contr. Conch. p. 122, 1850, . 158
Lavalleanum (Cerithium), d'Orb. Moll. de Cuba ii, p. 156, t. 23, f. 16, 1853. ?= C. iostoma, Pfr. 164
Lawleyanum (Bittium), Crosse. Journ. de Conch. p. 87, t. 1, f. 4, 1863, ... 154
Layardii (Cerithidea), A. Ad. Zool. Proc. p. 86, 1854, . . 165
Lemniscatum (Cerithium), Quoy. Voy. Astr. iii, p. 119, t. 54, f. 16-18, 1834, ... 135
Lentiginosum (Cerithium), Sowb. Reeve's Conch. Icon. sp. 77, 1865. ?= C. algicola, Ads. 129
Leucocephalum (Bittium), Watson. Challenger Exp. xv, p. 558, t. 38, f. 7, 1886, ... 157
Levukense (Triforis), Watson. Jour. Linn. Soc. xv, p. 100, 1881, ... 186
Lima (Cerithium), Brug. Anim. sans Vert. ix, p. 304. = C. reticulatum, Da Costa. 150
Limosa (Mastonia), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 263, t. 4, f. 16, 1884, ... 186
Lineatum (Cerithium), Dunker. Mss. 143

Lineatum (Cerithium), Lam. Enc. Meth. t. 443, f. 3a. b.
= C. asper. Linn. var. 148
Lineolatus (Triforis), Tapp. Canefri. Ann. Mus. Civ. Genoa. ix, p. 283, 1877, ... 190
Liocerithium, Tryon. 1887, ... 113, 142
Lissum (Cerithium), Watson. Journ. Linn. Soc. xv, p. 107, 1881, ... 130
Litteratum (Cerithium), Born. Mus. Cæs. p. 323, t. 11, f. 14, 15, ... 128
Lividulum (Cerithium), Risso. Europe Merid. iv, p. 154, 1826.
= C. rupestre, Risso. 126
Longicaudatum (Cerithium), Ad. and Rve. Voy. Samarang. p. 43, t. 10, f. 15, 1850. = Vertagus attenuatus. Phil. . 148
Longissima (Cerithium vulgatum, var.), B. D. D. Moll. Rouss. p. 200, t. 22, f. 10, 1884, ... 126
Longissimus (Triforis), Dall. Bull. Mus. Compar. Zool. ix, p. 80, 1882, ... 191
Lovenella, O. Sars. Moll. Norv. 187, 1878, . . . 119, 175
Luctuosum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée, v, p. 98, t. 23, f. 12, 13, 1854. = C. Traillii, Sowb. var. 135
Lusciniæ (Cerithium), Watson. Journ. Linn. Soc. xv, p. 112, 1881. ?= B. pigrum, Watson. 153
Lusorius (Triforis), Tapp. Canefri. Ann. Mus. Civ. Genoa. ix, p. 283, 1877, ... 190
Lutea (Bittium lacteum, var.), B. D. D. Moll. Rouss. p. 217, t, 26, f. 3, 4, 1884. 150
Lutosum (Cerithium), Menke. Synopsis. p. 86, 1828.
= C. ferrugineum, Say. Var. versicolor. 140
Lutulentum (Cerithium), Kien. Coq. Viv. p. 63, t. 22, f. 3,
= Cerithidea bicarinata, Gray. 167
Mac Andreæ (Triforis), A. Ad. Zool. Proc. p. 1, 1856.
= Lacochochlis granosa, S. Wood. 177
Macrostoma (Cerithium), Hinds. Voy. Sulph. p. 2, t. 16, f. 12, 1844, ... 142
Maculatus (Triforis), Pse. Zool. Proc. p. 777, 1870, . . 191
Maculosa (Clava), Martyn. Univers. Conch. t. 57, . . 145
Maculosum (Cerithium), Kiener. Coq. Viv. p. 36, t. 13, f. 3.
= C. adustum, Kiener. 126
Maculosum (Cerithium), Migh. Bost. Proc. ii, p. 22, 1848 . 137
Magnum (Cerithium), Jay. Cat. of Shells. Edit. 2, p. 83, t. 2, f. 5, 1836. = C. maculosum, Martyn. 145
Maillardi (Cerithium), Crosse. Journ. de Conch. p. 397, 1863, 137
Major (Cerithium versicolor, var.), Mörch. Mal. Blatt. xxiii, p. 117, 1876, ... 140
Malvaceus (Iniforis), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 239, t. 4, f. 1–2, 1884, ... 180
Mamillata (Cerithium), Risso. Europe Merid. iv, p. 158, 1826.
= Bittium reticulatum, Da Costa. 150

Mamillatum (Cerithium), Phil. Enum. Moll. Sicil. i, p. 194, t. 11, f. 11, 12, 1836. = C. conicum, Blainv. 165
Mamillanum (Cerithium), Watson, Journ. Linn. Soc. xv, p. 109, 1881. = B. amblyterum, Watson. 151
Mangiorum (Strombus), Schroeter. Phys. Conch. p. 383. = Cerithium sulcatum, Brug. 160
Margaritacea (Triforis), Dunker. 1881, Jouss. Bull. Soc. Mal. France, 227, 1884, ... 190
Marici (Inella), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 246, t. 4, f. 7, 1884, ... 180
Marmorata (Triforis), Pse. Martens. Donum. Bismark. 38, t. 2, f. 7, ... 180
Marmoratum (Cerithium), Quoy. Voy. Astr. iii, p. 109, t. 54, f. 4. 1834. = C. maculosum, Martyn. 145
Marmoratus (Triforis), Hinds. Ann. and Mag. ix, 18, 1843, . 191
Marmoreum (Cerithium), Kien. Coq. Viv. t. 31, f. 1. = C. maculosum, Martyn. 145
Maroccanum (Cerithium), Brug. Dict. No. 34, 1789. = Triforis perversus, Linn. 187
Martinianus (Vertagus), Pfr. Register. p. vii. = Cerithium fasciatum, Brug. 149
Massiliense (Cerithium), Locard. Ann. Soc. d'Agriculture, Lyon. viii, p. 188, 1885. = C. rupestre, Var. 126
Mastonia, Hinds. Voy. Sulphur, Moll. 30, 1844, . . 122, 182
Mastoniæforis, Jouss. Bull. Soc. Mal. France. Pt. 236, 1884. = Mastonia, Hinds. 122
Matukense (Cerithium), Watson, Journ. Linn. Soc. xv, p. 105, 1881, ... 148
Maxillaris (Triforis), Hinds. Ann. and Mag. xi, p. 18, 1843, 179
Mazatlanica (Cerithidea), Carp. Mazat. Cat. No. 395. = C. Sacrata, Gld. 162
Mediolaeve (Cerithium), Carp. Mazat. Cat. 334. = C. uncinatum, Gmel. var. 128
Mediterraneum (Cerithium), Desh. Anim. sans Vert. ix, p, 313. = C. rupestre, Risso. 126
Megasoma (Cerithium), C. B. Ad. Contr. Conch. p. 119, 1850. = C. Sagræ, d'Orb. 140
Melania (Cerithium vulgatum, var.), Monts. Bull. Soc. Mal. Ital. v, p. 225, ... 126
Melanosa (Cerithium paludosum, var.), Monts. Nom. Gen. e Spec. Conch. Medit. p. 121, 1884, ... 151
Melanura (Cerithium), C. B. Ad. Contr. Conch. p. 117, 1850, ... 140, 191
Menkei (Cerithium), Desh. Conch. Reunion. p. 97, t. 11, f. 15, 1863. = C. columna, Sowb. 123
Mesostoma, Desh. Paris Fossils. 2d. Edit. ii, 416, 1864, . . 118
Metalepsis Jouss. Bull. Soc. Mal. France. Pt. 3, p, 236, 1884. = Triforis, Desh. 122

Metaxæ (Cerithiopsis), Delle Chiaje. Memoire. iii, p. 222, t. 49, f. 29, 30, 1829, ... 173
Metaxia, Monts. Nom. Conch. Medit. p. 125, 1884.
= Cerithiopsis, Forbes & Hanley. 119, 173
Metcalfei (Cerithium), Sowb. Thes. Conch. ii, p. 869, f. 157, 158, 1855. =C. inflatum, Quoy. 132
Metcalfei (Triforis), Hinds. Ann. and Mag. xi, p. 11, 1843, . 191
Metula (Cerithium), Loven. Ind. Moll. Scand. p. 23, 1846, . 175
Micans (Triforis), Hinds. Ann. Mag. xi, p. 18, 1843, . . 179
Microptera (Cerithium), Kien. Coq. Viv. p. 93, t. 30, f. 3,
= C. fluviatile, P. and M. 160
Millepunctatum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee. v, p. 103, t. 24, f. 13, 14, 1854, ... 136
Milnes Edwardsii (Cerithium), Calcara.
= C. vulgatum, Brug. monstrosity. 125
Minima (Cerithium vulgatum, var.), Weink. Conch. Mittel. p. 154, 1868. = Var. Bourguignati, Locard. 126
Minimum (Bittium), Tenison-Woods, Roy. Soc. Tasmania, p. 35, cfr. Ibid. 1877, 123, 1878, ... 158
Minimum (Cerithium), Braz. Linn. Soc. N. S. W. I. p. 317, 1876, ... 145
Minimum (Cerithium), Brus. Conch. Dalm. Inedit. p. 17, 1864, ... 169, 170
Minimum (Cerithium), Hutton, Cat. Mar. Moll. N. Z. p. 27, 1873; Jour. de Conch. xxvi, 26.
= Triforis Angasi, Crosse. 179
Minimus (Lampanella), Gmelin. Syst. Nat. 3564, . . 118, 167
Minimus (Triforis), Pse. Zool. Proc. p. 774, 1870, . . . 191
Minor (Cerithidea), Mörch Malak. Blätt. xxiii, p. 92, 1876, 165
Minor (Cerithium lima, var.), Phil. Moll. Sicil. 1, 195,
= C. Jadertinum, Brusina. 151
Minor (Cerithium rupestre, var.), B. D. D. Moll. Rouss. p. 203, t. 23, f. 7, 8, 1884. = Var. Massiliense Locard. . . 126
Minor (Triforis perversa, var.), Monts. Poche. Note Conch. Medit. p. 13, 1875. = Var. adversas, Mont. 187
Minor (Tympanotonus fluviatilis, var.), Tapp-Canefri. Voy. Magenta. p. 38, 1874, ... 160
Minuta (Cerithium vulgatum, var.), de Serres. Phil. Enum. Moll. Sicil. i. t. 11, f. 8, ... 126
Minutissimus (Triforis), Tapp. Canefri. Ann. Mus. Civ. Genoa. ix, p. 283, 1877, ... 190
Minutum (Cerithium), Nuttall. Jay's Cat. of Shells, p. 75, . 144
Minutus (Potamides), Dkr. Ms.
= Cerithidea minor, Mörch. 165
Mirabile (Cerithium), C. B. Ad. Contr. Conch. p. 118, 1850,
= T. turris-Thomæ, Chemn. 188
Mirificus (Triforis), Desh. Conch. Reunion. p. 104, t. 11, f. 32, 33, 1863, ... 182

Mitraeforme (Cerithium), Sowb. Thes. Conch. ii, 873 f. 190, 1855. = C. rubus, Martyn. 132
Modestum (Cerithium), C. B. Ad. Contr. Conch. p. 117, 1850. = T. nigrocinctus, Ads. 188
Mollucanus (Cerithium), Renieri. Tavol. alfab. 1804. = vulgatum, Brug. 125
Molluccanus (Murex), Gmel. Syst. Nat. p. 35, 93. = Cerithium sulcatum, Born. 160
Monachus (Cerithium), Crosse Journ. de Conch. p. 347, 1864, ... 143
Monilifer (Triforis), Hinds. Ann. and Mag. xi, p. 19, 1843, . 183
Moniliferum (Cerithium), Dufresne. Kien. Coq. Viv. p. 49, t. 16, f. 3. = C. Morus, Lam. 134
Monophorus, Grillo. Desc. quelques esp. 15, 1877, . . . 122
Montagnei (Cerithium), d'Orb. Voy. Amer. Merid. v, p. 443, t. 63, f. 3, 4, ... 161
Montagnei (Cerithium), Sowb. var. Thes. Conch. = Cerithidea Fortunei, A. Ad. 162
Mörchii (Cerithidea), A. Ad. Thes. Conch. ii, p. 888, f. 283, 1855, ... 163
Moreleti (Aphanistylus), Wattebled. Journ. de Conch. p. 59, t. 4, f. 5, 1886. ? = C. Sinensis, Phil. 165
Moreleti (Cerithium), Folin. Les Meleagrinicoles, p. 68, t. 6, f. 10, 1867, ... 174
Morus (Cerithium), Lam. Anum. Sans Vert. Edit. 2, ix, p. 302, ... 133
Multiformis (Lampania), Lischke. Mal. Blatt. p. xvi, 106, 1869, 167
Multigranosus (Tympanotonos), Sowb. Thes. Conch. ii, p. 891, f. 302, 1855. = Cerithium homologum, Bayle. . . . 159
Munita (Cerithiopsis) Carp. Ann. Mag. N. Hist. 3, Ser. xiv, 1864, ... 172
Munitum (Cerithium), Sowb. Thes. Conch. ii, p. 858, f. 93, 1855, ... 129
Murex (Cerithium), Anton. Verzeich. p. 66, 1839, . . . 144
Muricatum (Cerithium), Brug. Dict. No. 27. = Tympanotonos fuscatus, Linn. 159
Muscarum (Cerithium), Say. Amer. Conch. v, t. 49, f. 1, 1832, 132
Musicum (Cerithium), Sowb. Thes. Conch. ii, p. 865, f. 130, 1855, ... 128
Musivum (Cerithium), Homb. Voy. Pol Sud. t. 24, f. 23, 24. 1854. = C. patiens, Bayle. 134
Mutabile (Cerithium), C. B. Ad. Bost. Proc. ii, p. 5, 1848, . 141
Mutatum (Cerithium), Sowb. Gen. of Shells, No. 42. = C. echinatum, Lam. 124
Mutica (Cerithium vulgatum, var.), B. D. D. Moll. Rouss. p. 200, t. 22, f. 8, 1884, ... 126

Naiadis (Cerithium), Woodward, = Cerithiopsis costulata, Moller. 176

Nana (Cerithiopsis tubercularis, var.), Jeffr. Brit. Conch. iv, p. 267, ... 168
Nana (Triforis), Dkr. 1881. Jouss. Soc. Mal. France. 227, 1884, 191
Nanum (Cerithium), C. B. Ad. Contr. Conch. p. 117, 1850, . 191
Nassoides (Cerithium), Sowb. Thes. Conch. ii, p. 875, f. 200, 201, 1855. = C. maculosum, Migh. 137
Nebulosum (Cerithium), Phil. Zeitsch. fur Malak. p. 66, 1851, 144
Nebulosum (Cerithium), Sowb. Thes. Conch. ii, p. 866, f. 60, 1855, ... 126
Neglecta (Cerithiopsis), C. B. Adams. Panama Shells No. 201, 1852, ... 177
Neglecta (Cerithiopsis), Weink. Cat. Coq. Mers d'Europe p, 13. = C. minima, Brus. 169
Neglectum (Cerithium), not C. B. Ad. Sowb. Thes. Conch. f. 235, 236. ?= C. fusiformis, C. B. Ad. 177
Nerinaceus (Cerithium), Reineri. Tavol. alfab. 1804. = C. vulgatum, Brug. 125
Nigra (Cerithidae), Hombr. et Jacq. Astrol. et Zel. = C. subcarinata, Sowb. 163
Nigrescens (Cerithium), Menke. Synopsis, p. 85, 1828. = L. minimus, Gmel. 168
Nigrinum (Cerithium), Phil. Zeitsch. für Malak. p. 24, 1848. = L. minimus, Gmel. 168
Nigro-balteatum (Cerithium), Smith. Zool. Alert Exped. p. 65, t. 5, f. n. 1884, ... 136
Nigro-cinctus (Triforis), C. B. Ad. Bost. Journ. ii, p. 286, t. 4, f. 11, ... 188
Nigro-fasciatum (Cerithium), Sowb. Reeve's Conch. Icon. p. 58, 1865. = C. morus, Var. bifasciatum, Sowb. 134
Nigro-fuscus (Triforis), A. Ad. Zool. Proc. p. 278, 1851, . 190
Nigro-punctatum (Cerithium), Sowb. Thes. Conch. ii, p. 860, f. 97, 1855. ? = C. armatum, Phil. 124
Nigrum (Cerithium), Phil. Zeitsch. für Malak. p. 19, 1848. = C. variabile, C. B. Ad. 140
Nigrum (Cerithium), Totten, Silliman's Journ. xviii, p. 352, f. 8, 152
Nitens (Bittium), Cpr. Ann. and Mag. xiii, p. 478, 1864, . 158
Nitidum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v, p. 106, t. 24, f. 30-33, 1854, ... 143
Nitidum (Cerithium), McAndrew and Forbes. Ann and Mag. xix, p. 97, t. 9, f. 2, 1847. = C. metula, Lovèn. . . . 175
Nitidum (Cerithium), Sowb. Thes. Conch. ii, p. 872, f. 180, 181, 1855. = C. gentile, Bayle. 135
Nivea (Triforis), M. Sars. MS. = Læocochlis granosa, S. Wood. 177
Niveum (Cerithium), Biv. = Bittium lacteum, Phil. 150
Nivosum (Cerithium), Sowb. Thes. Conch. ii, p. 875, f. 205, 1855. = C. morus, var. variegatum. 134
Nobilis (Vertagus), Reeve. Conch. Syst. 148

Nodiferus (Tritoris), Ad. and Rve. Voy. Samarang. p. 46, t. 11, f. 37, a. b. 1850, ... 177
Nodosus (Strombus), Schroeter. Thes. Conch. 386. = Cerithium vulgatum, Brug. 125
Nodulosa (Cerithium vulgatum, var.) Phil. B. D. D. Moll. Rouss. 200, ... 126
Nodulosum (Cerithium), Brug. Enc. Meth. t. 442, f. 3, . 122
Notatum (Cerithium), Menke. Synopsis, p. 33, 1826. = C. muscarum, Say. 132
Novae-Hiberniæ (Cerithium), A. Ad. Thes. Conch. ii, p. 857, f. 84, 85, 1855. = C. eburneum, Brug. 129
Novæ-Hollandiæ (Cerithium), A, Ad. Thes. Conch. ii, p. 864, f. 54, 1855, ... 124

Obeliscoides (Cerithium), Jeffr. Zool. Proc. p. 55, t. 6, f. 4, 4a. 1885, ... 175
Obeliscus (Cerithium), Brug. Encyc. Meth. t. 443, f. 4, a. b. . 146
Obesula (Cerithiopsis tuberculariis, var.) B. D. D. Moll. Rouss. p. 205, t. 27, f. 4, 1884, ... 168
Obesula (Mastonia), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 255, t. 4, f. 17, 1884, ... 185
Obesulum (Cerithium), Sowb. Reeve's Conch. Icon. sp. 149, 1865, ... 139
Obesulus (Triforis perversus, var.), Monts. B. D. D. Moll. Rouss. p. 212, t. 26, f. 18-20, 1884, ... 187
Obesum (Cerithium), Sowb. Thes. Conch. ii, p. 868, f. 141, 142, 1855. = C. repletulum, Bayle. 139
Obscurum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v, p. 102, t. 24, f. 5, 6, 1854. = C. morus, Lam. . . 133
Obtusum (Cerithium), Lam. Anim. sans Vert. No. 17, . 161
Ocellatum (Cerithium), Brug. Enc. Meth. No. 43, . . 132
Omissum (Cerithium), Bayle. Journ. de Conch. p. 250, 1880. = C. Erythræonense, Lam. 123
Oosimense (Cerithium), Watson, Journ. Linn. Soc. xv, p. 117, 1881, ... 156
Opportunum (Cerithium), Bayle. Journ. de Conch. p. 248, 1880, ... 130
Ornata (Cerithidea), A. Ad. Thes. Conch. ii, p. 887, f. 277, 278, 1855, ... 162
Ornatum (Cerithium), Desh. Encyc. Meth. iii, 1053, 1832, . 188
Oryza (Bittium), Mörch. Mal. Blatt. xxiii, p. 121, 1876, . 158
Oryza (Triforis), Pse. Zool. Proc. p. 776, 1870, . . . 191
Owenii (Cerithium), Fer. Martini Conch. t. 155, f. 1459. = C. radula, Linn. 159

Pacificum (Cerithium), Sowb. Gen. of Shells. No. 42, f. 9. . 158
Pagodula (Cerithium), Anton. Verzeich. p. 65, 1839, . . 144
Pagodulus (Cerithiopsis), A. Ad. Ann. and Mag. p. 130, 1861, 177
Pagodus (Triforis), Hinds. Zool. Proc. p. 22, 1843, . . 191

Pallescens (Triforis perversus, var.) Jeffr. Brit Conch. iv, p. 262, ... 187
Pallida (Cerithium Sagræ, var.), Mörch. Mal. Blatt. xxiii, p. 119, 1876, ... 140
Pallidum (Bittium), Pfr. Archiv fur Naturg. p. 287, 1840, . 152
Pallidus (Triforis), Pse. Zool. Proc. p. 774, 1870. . . 191
Paludosa (Bittium reticulatum, var.), B. D. D. Moll. Rouss. p. 215, t. 25, f. 14-19, 1884, ... 151
Palustris (Potamides), Linn. Syst. Nat. Edit. xii, 1213, . 160
Papillosum (Cerithium), Sowb. Thes. Conch. ii, p. 876, f. 215, 1855. = C. lacteum, Kiener. 144
Parcum (Cerithium), Gld. Bost. Proc. vii, p. 387, 1861, . 155
Parva (Cerithium litteratum, var.), Kien. Coq. Viv. t. 14, f. 1. = C. algicola, C. B. Ad. 129
Patiens (Cerithium), Bayle. Journ. de Conch. p. 249, 1880, . 134
Patulum (Cerithium), Sowb. Thes. Conch. ii, p. 871, f. 74, 1855, ... 133
Pauxillum (Cerithium), A. Ad. Zool. Proc. p. 86, 1854, . 141
Paxillum (Cerithium), Pse. Zool. Proc. p. 433, 1860, . . 138
Paxillus (Cerithiopsis), A. Ad. Ann. and Mag. p. 130 1861, . 177
Peasei (Triforis), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 222, 1884, ... 191
Pellucidum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelee. v, p. 101, t. 23, f. 24, 25, 1854. ? = C. patulum, Sowb. 133
Peloritanum (Cerithium), Cantraine. Mem. Acad. Brux. ii, 392. = Lampanella minimus, Gmel. 168
Penuticulata (Triforis), Dkr. 1881, Jouss. Soc. Mal. France. 227, 1884, ... 191
Perfectus (Triforis), Pse. Zool. Proc. p. 775, 1870, . . 191
Perlatus (Triforis), Issel. Mar Ross. p. 152, 1869, . . 185
Perparvulum (Bittium), Watson. Challenger Exp. xv, p. 554, t. 38, f. 3, 1886, ... 157
Perpusillum (Bittium), Tryon. 154
Peruvianum (Cerithium), d'Orb. Voy. Amer. Merid. 443, t. 77, f. 9, 10, ... 153
Perversus (Triforis), Linn. Syst. Nat. Edit. xii. p. 1231, 1767, 187
Petitii (Cerithium), Schramm. Guadl. p. 11, 1869. =C. costatum, Da Costa. 164
Petrosum (Cerithium), Wood. Ind. Test. Suppl. t. 4, f. 9, . 133
Pfeifferi (Triforis), Crosse. Journ. de Conch. p. 47, t. 1, f. 14, 15, 1865, ... 182
Pfeifferi (Vertagus), Dkr. Mal. Blatt. xxiv, p. 75, 1877. = C. turritum, Sowb. 147
Pharos (Vertagus), Hinds. Voy. Sulph. p. 27, t. 11, f. 3, 4, 1844, ... 149
Philomelæ (Cerithium), Watson. Journ. Linn. Soc. xv, p. 113, 1881. ?= B. pigrum, Watson. 153

Phoxum (Cerithium), Watson. Journ. Linn. Soc. xv, p. 106, 1881, ... 148
Pictum (Cerithium), Anton. Verzeich. p. 64, 1839, . . 144
Pictum (Murex), Wood. Ind. Test. Supp. t. 5, f. 2-4. = C. semiferrugineum, Lam. 128
Pigrum (Cerithium), Watson. Journ. Linn. Soc. xv, p, 111, 1881, ... 153
Pingue (Cerithium), A. Ad. Sowb. Thes. Conch. ii, 877, . 141
Piperitum (Cerithium), Sowb. Thes. Conch. ii, p. 867, f. 136, 137, 1855, ... 144
Piraini (Cerithium), Benoit. Ricerche Malac. 12, 1843. = C. Brongniarti, Maravigna. 168
Pirenale (Cerium), Quoy. Voy. Astrolabe. = Lampania zonalis, Brug. 167
Pirenella, Gray. Zool. Proc. 154, 1847, . . . 117, 165
Placidum (Cerithium), Gould. Bost. Proc. vii, p. 386, 1861, . 139
Planispiratum (Cerithium), Sowb. Thes. Conch. ii, p. 857, f. 91, 1855. = C. eburneum, Brug. 129
Planum (Cerithium), Anton. Verzeichniss. p. 66, No. 2288, 1838, ... 131
Platygyra, Mörch. Mal. Blatt. 81, 1860. = Bittium, Gray. 115
Platynotum (Cerithium), Anton. Verzeich. p. 66, 1839, . 144
Plicata (Cerithium rupestre, var.), B. D. D. Moll. Rouss. p. 203, t. 23, f. 5, 6, 1884. = Var. strumaticum, Locard. . 126
Plicata (Cerithium vulgatum, var.), Phil. Moll. Sicil. i, p. 192, 1836. = Var. alucastrum, Brocchi. 126
Pliculosum (Cerithium), Mke. Verz. Malsb. p. 27, 1829, . 165
Plumbeum (Cerithium), Sowb. Thes. Conch. ii, p. 889, f. 293, 1855, ... 160
Polygonum (Cerithium), Sowb. Thes. Conch. ii, p. 854, f. 46, 1855. = C. opportunum, Bayle. 130
Pommeraniæ (Lacocochlis), Dkr. and Metz. Jahrb. Deutsch. Mal. Gessell. i, p. 146, t. 7, f. 3, 1874. = L. granosa, S. Wood. 177
Porcellanum (Bittium), Watson. Challenger Exped, xv, p. 559, t. 38, f. 8, 1886, ... 157
Potamides, Brongniart. Ann. du Mus. xv. 367, 1810, . 115, 158
Poulsenii (Fastigiella), Mörch. Journ. de Conch. xxv, p. 207, 1877, ... 150
Procerum (Cerithium), Jeffr. Ann. and Mag. p. 322, 1877, . 176
Procerum (Cerithium), Kien. Coq. Viv. p. 22, t, 18, f. 1, 1a. = Vertagus fasciatus, Brug. 149
Proditum (Cerithium), Bayle. Journ. de Conch. p. 246, 1880, . 129
Proditum (Cerithium), Bayle. Journ. de Conch. p. 249, 1880. = C. Adouini, Bayle. 130
Protextum (Cerithium), Conr. Proc. Phila. Acad. iii, p. 26, 1848. = Terebra. 145

Protractum (Cerithium), Bivona. MSS. Aradas and Benoit. 230. = C. vulgatum, Brug, var. 126
Provinciale (Cerithium), Locard. Ann. Soc. Agric. Lyon. 185, 1885. = C. vulgatum, Brug. 126
Pseudocerithium, Cossmann. 1884, ... 114
Pterostoma, Desh. Paris Foss. 2d Edit. ii, 428, 1864, . . 119
Pulchella (Cerithiopsis), Jeffr. Ann. and Mag. ii, p. 129, t. v. f. 8, a-c, 1858. = C. tubercularis, Mont. var. . . . 168
Pulchella (Cerithium vulgatum, var.), Phil. Enum. Moll. Sicil. i. t. 11, f. 9, ... 126
Pulchellum (Cerithium), C. B. Ad. Contr. Conch. p. 121, 1850, ... 171
Pulchellus (Triforis), A. Ad. Zool. Proc. p. 278, 1851, . . 191
Pulcher (Turbo), Dillw. Cat. No. 91.
= Cerithidea decollata, Linn. 161
Pulcher (Vertagus), A. Ad. Conch. Icon. sp. 20, 1865, . . 146
Pulchra (Cerithidea), C. B. Ad. Panama Cat. p. 156.
= C. montagnei, d'orb. var. 161
Pulicarium (Cerithium), Phil. Zeitsch. fur Malak. p. 20, 1848.
= C. eburneum, Brug. 129
Pullatus (Potamis), Gld. P. R. R. Rept. v, p. 333, t. 11, f. 23, 24. = Cerithium sacratum, Gould. 162
Pullum (Cerithium), Phil. Archiv. fur Naturg. i, p. 66, 1845, 144
Pulvis (Cerithiopsis), Issel. Mar Rosso. p. 150, 1869, . . 172
Pumilum (Cerithium), Phil. Zeitsch. fur Malak. p. 66, 1851, . 144
Punctatum (Cerithium), Brug. Enc. Meth. No. 40.
= C. piperitum, Sowb. 144
Punctatum (Cerithium), Linn. Syst. Nat. Edit. xii, 1231, . 170
Punctatus (Triforis), Pse. Zool. Proc. p. 775, 1870, . . 191
Punctulatum (Cerithium), Gmel. Syst. Nat. p. 3503.
?= C. algicola, C. B. Ad. 129
Pupa (Cerithium), Sowb. Reeve's Conch. Icon. sp. 84, 1865.
= C. tuberculatum, Linn. var. 133
Pupæforme (Cerithium), A. Ad. Thes. Conch. ii, p. 877, f. 221, 1855. = C. macrostoma, Hinds. 142
Pupæforme (Cerithium), Watson. Journ. Linn. Soc. xv, p. 114, 1881, ... 156
Pupæformis (Triforis), Desh. Conch. Reunion. p. 105, t. 12, f. 3, 4, 1863, ... 184
Pupiformis (Cerithiopsis), Carp. Mazat. Cat. 443, 1857, . 177
Pupiformis (Colina), A. Ad. Zool. Proc. p. 176, 1853.
= C. macrostoma, Hinds. 142
Pupoidea (Cerithidea), Mörch. Mal. Blatt. xxiii, p. 93, 1876, . 165
Purpurascens (Cerithium), Sowb. Thes. Conch. ii, p. 872, f. 182–186, 1855. = C. Traillii, var. splendens, Sowb. . 135
Purpurea (Cerithiopsis), Angas. Zool. Proc. p. 36, t. 5, f. 7, 1877. = C. crocea, Angas. var. 175
Purpurea (Cerithiopsis), Cpr. Ann. and Mag. xv. p. 397, 1865, 171

Pusillum (Bittium), Dkr. Mal. Blatt. vi, p. 224, 1860.
= B. perpusillum, Tryon. 154
Pusillum (Cerithium), Gould. Bost. Proc. iii, p. 120, 1849. . 155
Pusillum (Cerithium), Jeffr. Ann. and Mag. t. 2, f. 10, 11, 1856.
= B. submamillatum, Rayn. 158
Pusillum (Cerithium), Nuttal. Jay's Cat. of Shells. p. 75.
?= C. lacteum, Kiener. 144
Pusillum (Cerithium), Pfr. Arch. f. Natur. p. 256, 1840.
?= Triforis perversus, Linn. 187, 188
Pusiola (Triforis), Dkr. 1881. Jouss. Soc. Mal. France. 227, . 191
Pustulosus (Triforis), Pse. Zool. Proc. p. 775, 1870, . . 191
Pygmæa (Colina), A. Ad. Zool. Proc. p. 308, t. 19, f. 19, 1867.
= Cerithium macrostoma, Hinds. 142
Pygmæum (Cerithium), Phil. Enum. Moll. Sicil. ii, p. 162, t. 15, f. 26, 1844. = C. tubercularis, Mont. var. . . 168
Pyramidalis (Triforis), Ad. and Rve. Voy. Samarang. p. 46, t. 11, f. 36, a. b. 1850. = T. sculptus, Hinds. . . . 178
Pyramidatum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v. p. 100, t. 23, f. 20, 21, 1854. = C. munitum, Sowb. 129
Pyrazisinus, Heilprin, Trans. Wagner. Inst. i, 115, 1886, . 116
Pyrazus, Montf. Conch. Syst. ii, 459, 1810, . . . 116, 158

Quadrata (Cerithidea), Sowb. Conch. Icon. sp. 5, 1866.
= C. obtusa, Lam. var. 161
Quadrifilatum (Cerithium), Carp. Journ. de Conch. p. 143, 1865, ... 153
Quadrilineata (Triforis), Dkr. Soc. Mal. France, 227, 1884, . 191
Quadriseriata (Bittium lacteum, var.), B. D. D. Moll. Rouss. p. 216, t. 26, f. 7, 1884, ... 150
Quoyi (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v, p. 97, t. 23, f. 6, 7, 1854. = C. rhizoporarum, A. Ad. . 162

Radix (Cerithium), Dufo. Ann. Sci. Nat. p. 62, 1840.
= C. fluviatile, P. and M. 160
Radula (Murex), Linn. Syst. Nat. Edit. xii, 1226, . . 159
Radula (Murex), Olivi. Zool. Adr. p. 152, 1792.
= Triforis perversus, Linn. 187
Raricostata (Cerithidea), A. Ad. Zool. Proc. p. 85, 1854, . 165
Rarimaculatum (Cerithium), Sowb. Thes. Conch. ii, p. 875, f. 204, 1855, ... 139
Ravidum (Cerithium), Phil. Abbild. p. 15, t. 1, f. 8, 1849, . 147
Rawsoni (Cerithium), Krebs. MSS. Möreh. Mal. Blatt. xxiii, p. 120, 1876, ... 144
Recurvus (Vertagus), Sowb. Thes. Conch. ii, p. 854, f. 20, 1855, ... 147
Reevianum (Cerithidea), C. B. Ad. Panama Cat.
= C. Montagnei, d'Orb. 161
Reevei (Triforis), Desh. Conch. Reunion. p. 101, t. 11, f. 25, 26, 1863, ... 178

Regalis (Euthymia), Jouss. Bull. Soc, Mal. France. Pt. 3, p. 265, t. 4, f. 18, 1884, ... 177
Repanda (Cerithium vulgatum, var.), B. D. D. (not Monts.) Moll. Rouss. p. 201, t. 22, f. 14, 1884.
= Var. inscriptum, Monts. 126
Repanda (Cerithium vulgatum, var.) Mts. Enum. e Sin. p. 37, 126
Repletum (Cerithium), Bayle. Journ. de Conch. p. 248, 1880, 139
Reticulatum (Cerithiolum), DaCosta. Brit. Conch. p. 117, t. 8, f. 13, 1779, ... 150
Reticulatum (Cerithium), Totten. Silliman's Journ. xxviii, p. 352, f. 8. = C. nigrum, Totten. 152
Reticulatus (Strombus), Muhlf. Verh. Berlin. N. F. p. 207, t. 2, f. 1, 1829. = Bittium varium, Pfr. 152
Reticulatus (Turbo), Donov. Brit. Shells. v, t. 159, 1803.
= Triforis perversus, Linn. 187
Retifera (Tympanotonos), Sowb. Thes. Conch. ii, p. 892, f. 295. 1855. = P. fluviatilis, Pot. and Mich. 160
Rhinoclavis, Swainson. Malacol. 157, 315, 1840.
= Vertagus, Klein. 114
Rhizoporarum (Cerithidea), A. Ad. Zool. Proc. p. 85, 1854, . 162
Rhodostoma (Cerithium), A. Ad. Thes. Conch. ii, p. 861, f. 103. 1855. = C. serotinum, A. Ad. 141
Rigens (Cerithium), Bayle. Journ. de Conch. p. 244, 1880.
= C. macrostoma, Hinds. 142
Rissoidea (Cerithidea), Sowb. Thes. Conch. ii, p. 889, f. 289, 1855, ... 163
Rissoidae (Cerithium), Sowb. Conch. Icon. f. 107, 1865, . 140
Rivale (Cerithium), Bayle. Journ. de Conch. p. 250, 1880.
= C. undulatum, Sowb. 166
Robustum (Cerithium), Sowb. Reeve's Conch. Icon. sp. 44, 1865.
= C. Trailii, var. alternatum, Sowb. 135
Robustus (Triforis), Pse. Zool. Proc. p. 775, 1870, . . 191
Rosea (Cerithiopsis), A. Ad. Ann. and Mag. p. 130, 1861, . 177
Roseus, (Triforis), Hinds. Ann. and Mag. xi, p. 21.
= T. ruber, Hinds. 182
Rossiteri (Inella), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 249, t. 4, f. 9, 1884, ... 185
Rostratum (Cerithium), Sowb. Thes. Conch. ii, p. 861, f. 104, 1855, ... 130
Ruber (Triforis), Hinds. Ann. and Mag. xi, p. 19, 1843, . 182
Rubrolineatum (Cerithium), Sowb. Thes. Conch. ii, p. 874, f. 199, 1855. = C. Hanleyi, Sowb. 135
Rubropunctatum (Cerithium), Anton. Verzeich. p. 65, 1839, . 144
Rubus (Cerithium), Martyn. Universal Conch. t. 28, . . 131
Rude (Cerithium), Anton. Verzeich. p. 66, 1839, . . . 144
Rudis (Bittium reticulatum, var.) Brugnone. Cat. Mont. Pellegr. t. 1, f. 4. = Var. scabrum, Oliv. 150
Rufula (Triforis), Watson. Challenger Exp. xv, p. 566, t. 42, f. 2,. 186

Rugata (Clava), Martyn. Universal Conch. t. 12.
= C. asper, Linn. 148
Rugatum (Bittium), Cpr. Brit. Assoc. Rept. p. 539, 1866; Ann. Mag. Nat. Hist. 1866. = B. asperum, Gabb. . . 153
Rugosa (Cerithiopsis), Gld. Bost. Proc. vii, p. 388, 1861, . 177
Rugosum (Cerithium), Wood. Ind. Test. Suppl. t. 4, f. 10.
= C. patiens, Bayle. 134
Rugulosum (Cerithium), C. B. Ad. Contr. Conch. p. 121, 1850, 158
Rugulosum (Cerithium), Sowb. Thes. Conch. f. 237.
= C. metaxæ, Delle Chiaje. 119, 173
Rupestre (Cerithium), Risso. Hist. Eur. Merid. iv, p. 154, 1826, ... 126
Ruppellii (Cerithium), Phil. Zeitsch. fur Malak. p. 22, 1848, . 124
Sacrata (Cerithidea), Gld. Bost. Proc. iii, p. 118, . . . 162
Sagræ (Cerithium), d'Orb. Moll. de Cuba. ii, p. 157, t. 1846, . 140
Salebrosum (Cerithium), Sowb. Thes. Conch. ii, p. 862, f. 114, 115, 1855, ... 131
Salmacida (Cerithidea), Morelet. Test. Noviss. Cubanæ. p. 27, 1849, ... 164
Sandbergeri, Bosquet. Mem. Desc. Geol. Neerlande. iii, 53, 1861, ... 118
Sandvichense (Cerithium), Sowb. Conch. Icon. sp. 37, 1865, . 127
Sardoum (Cerithium), Cantraine. Acad. Brux. ii, p. 392, 1836.
= C. conica, Blainv. 165
Savignyi (Cerithium), Fisch. Journ. de Conch. p. 244, 1865.
= C. Ruppellii, Phil. 124
Savignyus (Murex), Delle Chiaje. Mem. iii, t. 49, f. 32, 34, 1841.
= Triforis perversus, Linn. 187
Sayi (Cerithium), Menke. Gould. Invert. Mass. 1st. Edit. 128.
= B. nigrum, Totten. 152
Scaber (Murex), Olivi. Zool. Adr. p. 153, 1792.
= Cerithium reticulatum, DaCosta. 151, 150
Scabrella (Cerithiopsis), Tapp. Canefri. Ann. Mus. Civ. Genoa, ix, p. 282, 1877, ... 177
Scabricosta (Cerithium), Dkr. Zeitsch. fur Malak. p. 110, 1853, 144
Scabridum (Cerithium), Phil. Zeitsch. fur Malak. p. 23, 1848.
= C. Riippellii, Phil. 124
Scabridum (Cerithium), Reeve. Conch. Icon.
= C. columna, Sowb. 123
Scalariforme (Cerithium), Say. Journ. Philada. Acad. p. 128, 1825, ... 163
Scalaris (Cerithiopsis corona, var.) Monts. Nuova Rev. p. 38, 1875. ?= C. diadema, Watson. 169
Scalatum (Bittium), Dkr. Mal. Blatt. xviii, p. 153, 1871, . 158
Schmeltziana (Triforis), Dunker. Jouss. Soc. Mal. 227, 1884, . 191
Schwartzii (Cerithium), Hörnes. 1856.
?= C. submamillatum, Rayn. 158
Scitulus (Triforis), A. Ad. Zool. Proc. p. 278, 1851, . . 191

Sculptum (Cerithium), Pse. Amer. Journ. Conch. v, p. 77, t. 8, f. 8. 1869, ... 125
Sculptum (Lampania), Sowb. Thes. Conch. ii, p. 868, f. 144, 145, 1855. = C. interruptum, Menke. 143
Sculptus (Triforis), Hinds. Ann. and Mag. xi, p. 17, 1843, . 178
Seila, A. Ad. Ann. Mag. N. Hist. vii, 130, 1861, . 119, 174
Semiferrugineum (Cerithium), Lam. Anim. sans Vert. . . 128
Semi-ferrugineum (Cerithium), Mörch. Cat. Yoldi. No. 1123. = C. cordigerum, Bayle, ... 146
Semilævis (Bittium), Tenison-Woods. Roy. Soc. Victoria, xiv, p. 58, 1878, ... 158
Seminuda (Cerithium vulgatum, var.), B. D. D. Moll. Rouss. p. 201, t, 22, f. 11, 12, 1884, ... 123
Seminudus (Vertagus), Sowb. Reeve's Conch. Icon. sp. 24, 1866, ... 146
Semipicta (Cerithiopsis), Gld. Bost. Proc. vii, p. 388, 1861, . 177
Semitrisoulcatus (Pyrazus), Bolt. Mörch. Yoldi Cat. p. 57, . 160
Septemstriatum (Cerithium), Say. Amer. Conch. v. t. 49, f. 2, 1832. = C. minimum, Gmel. 168
Septem-striatum (Cerithium), Sowb. Thes. Conch. No. 158. = Bittium albovittatum, C. B. Ad. 168
Seriatus (Trochus), von Muhlf. Verh. Berl. Ges. i, p. 200, t. 1, f. 7, 1824. = Triforis perversus, Linn. 187
Serotinum (Cerithium), A. Ad. Thes. Conch. ii, p. 861, f. 102, 1855, ... 141
Serratus (Murex), Wood. Index. Testac. = Cerithium rubus, Martyn. 132
Servaini (Cerithium), Locard. Ann. Soc. d'Agriculture, Lyon. viii, p. 186, 1885. = C. vulgatum, Brug. var. . . . 126
Servaini (Mastonia), Jouss. Bull. Soc. Mal. France. Pt. 3, p. 253, t. 4, f. 11, 1884. = T. perlatus, Issel. . . . 185
Sigsbeana (Cerithiopsis), Dall. Bull. Mus. Comp. Zool. ix, p. 87, 1882, ... 177
Similis (Cerithidea), A. Ad. Zool. Proc. p. 84, 1854, . . 165
Similis (Triforis), Pse. Zool. Proc. p. 774, 1870, . . . 191
Sinensis (Cerithidea), Phil. Zeitsch. fur Malak. p. 19, 1848, . 164
Sinensis (Murex.), Gmel. Syst. Nat. Edit. xiii, No. 54. = Cerithium obeliscus, Brug. 146
Sinon (Cerithium), Bayle. Journ. de Conch. p. 243, 1880, . 166
Siphonatum (Cerithium), Sowb. Reeve. Conch. Icon. sp. 90, 1865. = C. citrinum, Sowb. 123
Solida (Cerithium eburneum, var.), Mörch. Mal. Blatt. xxiii, p. 114, 1876, ... 129
Sordidulum (Cerithium), Gould. Boston Proc. iii, p. 119, 1849. = C. rubus, Martyn. 132
Sorex (Cerithiopsis), Carp. Mazat. Cat. 444, 1857, . . 177
Sowerbyi (Cerithium), Kien. Coq. Viv. p. 18, t. 7, f. 2, . 145
Spadiceum (Cerithium), Phil. Zeitsch. fur Malak. p. 67, 1851, ... 144

Spathuliferum (Cerithium), Sowb. Thes. Conch. ii, p. 859, f. 94, 1855. 130
Speciosus (Triforis), Ad. and Rve. Voy. Samarang. p. 45, t. 11, f. 28, a. b. 1850, ... 183
Spina (Cerithiolum), Tiberi. Bull. Mal. Ital. p. 264, 1869. = Bittium reticulatum, DaCosta. 150
Spinosa (Cerithium vulgatum, var.), Blainv. Faune Franc. t. vi, a. f. 3, 126. = Var. subvulgatum, Locard. . . 126
Splendens (Cerithium), Sowb. Thes. Conch. ii, p. 872, f. 191, 1855. = C. Traillii, Sowb. var. 135
Squamulosa (Fastigiella), Pse. Amer. Journ. Conch. iii, p. 290, t. 24, f. 15, 1867. = Coralliophila. 150
Steenstrupi (Lampania), Troschel. Gebiss der Schneck. i, p. 149. = L. Cumingii, Crosse. 166
Stejnegeri (Cerithiopsis), Dall. Proc. Nat. Mus. vii, p. 345, 1884, ... 171
Stenodeum (Cerithium), Locard. Ann. Soc. d'Agriculture, Lyon. viii, p. 186, 1885. = C. vulgatum, Brug. var. . 126
Stercus-muscarum (Cerithium), Kien. Coq. Viv. p. 4, t. 49, f. 2. = C. versicolor, C. B. Ad. var. 140
Stercus-muscarum (Cerithium), Valenc. Obs. Humb. and Bonpl. ii, 278. = C. ocellatum, Brug. 132
Stigmosum (Cerithium), Gld. Bost. Proc. vii, p. 386, 1861, . 144
Stilus, Jeffreys. Zool. Proc. 52, 1884, ... 113, 144
Striatellus (Trochus), Dillw. Cat. p. 813. = C. minimum, Gmel. 168
Striatissimum (Cerithium), Sowb. Thes. Conch. ii, p. 856, f. 86, 87, 1855. = C. eburneum, Brug. 129
Striatum (Cerithium), Homb. and Jacq. Voy. Astr. and Zelée. v, p. 100, t. 23, f. 16, 17, 1854, ... 130
Striatus (Strombus), Schroeter. Einleit. Conch. = Cerithium Erythraeonense, Lam. 123
Strumaticum (Cerithium), Locard. Ann. Soc. d'Agriculture, Lyon. viii, p. 187. 1885. = C. rupestre, Risso. var. . . 126
Stylia, Jouss. Bull. Soc. Mal. France. Pt. 3, p. 236, 1884. = Triforis, Desh. 122
Subcarinata (Cerithidea), Sowb. Thes. Conch. ii, p. 889, f. 287, 1855. = C. bicarinata, Gray. 163
Subcylindricum (Cerithium), Brus. Conch. Dalm. Ind. p. 17, 1864. = Cerithiopsis Metaxae, Delle Chiaje. . . . 173
Submamillatum (Cerithium), Rayneval. 1864. Monts. Nom. Conch. Medit. 123, 1884, ... 157
Subnodosum (Cerithium), Adams. Sowb. Thes. Conch. ii, p. 864, t. 178, f. 47, 1855. = C. vulgatum, Brug. . . 125
Subreticulata (Cerithiopsis), Dkr. Mal. Blatt. vi, p. 224, 1860, 173
Subulata (Cerithium tuberculare, var.), Wood. Crag Moll. p. 70, t. 8, f. 5-7, 1848, ... 168
Subulatum (Cerithium), Lam. Kien. Coq. Viv. t. 19, f. 1. = C. Pharos, Hinds. 149

Subulatus (Murex), Montagu. (not Lam.) Supp. p. 115, t. 30, f. 20. = Cerithium punctatum, Linn. 170
Subviride (Cerithium), Sowb. Thes. Conch. ii, p. 881, f. 247, 1855, ... 166
Subvulgatum (Cerithium), Locard. Ann. Soc. d'Agriculture, Lyon. viii, p. 185, 1885, ... 126
Sueziensis (Cerithium reticulatum, var.), Issel. Mar Ross. p. 149, 1869, ... 151
Sulcatum (Cerithium), var. Kien. Coq. Viv. t. 27, f. 1. = C. semitrisulcatum. Bolt. 160
Sulcatus (Murex), Born. Mus. p. 320. 160
Sulcosus (Triforis), Pse. Zool. Proc. p. 774, 1870, . . 191
Suturale (Cerithium), Phil. Abbild. t. 1, f. 4, 1849, . . 123
Suturalis (Triforis), Ad. and Rve. Voy. Samarang. p. 45, t. 11, f. 29, a. b. 1850, ... 183
Sychar, Hinds. Voy. Sulphur. Moll. 28, . . . 122, 188

Tæniatum (Cerithium), Quoy. Voy. Astr. iii, p. 113, t. 54, f. 21, 1834. = C. vertagus, Linn. var. 149
Tæniatum (Cerithium), Sowb. Reeve's Conch. Icon. sp. 119, 1865, = C. pingue. A. Ad. 141
Tasmanica (Triforis), Tenison-Woods. Roy. Soc. Tasmania. p. 28, 1875, ... 184
Telescopium, Montfort. Conch. Syst. ii, 438, 1810, . 117, 161
Telescopium (Trochus), Linn. Syst. Nat. Edit. xii, 1231, . 161
Tenellum (Cerithium), Sowb. Thes. Conch. ii, p. 857, f. 88-90, 1855, ... 132
Tenue (Cerithium), Sowb. Thes. Conch. ii, p. 876, f. 212, 1855. = C. Icarus, Bayle. 138
Tenui-sculptus (Vertagus), Sowb. Reeve's Conch. Icon. sp. 22, 1866. = C. gemmatum, Hinds. 146
Tenuis (Cerithidea), Pfr. Archiv. fur Naturg. i, p. 357, 1839. ?= C. scalariformis, Say. 163
Tenuis (Cerithium algicola, var.), Mörch. Mal. Blatt. xxiii, p. 115, 1876, ... 129
Tenuis (Cerithium atratum, var.), Mörch. Mal. Blatt. xxiii, p. 113, 1876, ... 129
Terebella (Murex), Gmel. Syst. Nat. Edit. xiii. = Cerithium radula, Linn. 159
Terebelloides (Bittium), Martens, Liste des Moll. de Nouv. Zeal. p. 27, ... 158
Terebellum (Cerithium), C. B. Ad. Cat. Shells Jamaica, p. 19, 1847. = C. terebrale, C. B. Ad. 174
Terebrale (Bittium), C. B. Ad. Bost. Proc. p. 134, 1846, . 174
Terebralia, Swainson. Man. Malacol. 157, 315, 1840, . 116, 160
Tessellata (Bittium lactum, var.), B. D. D. Moll. Rouss. p. 217, t. 26, f. 5, 6, 1884, ... 150
Tessellatum(Cerithium), Sowb. Thes. Conch. ii, p. 867, f. 133, 134, 1855, ... 127

PAGE.

Thomasiæ (Cerithium), Sowb. Reeve's Conch. Icon., sp. 108, 1865. = C. ferrugineum, Say. Var. versicolor. . . . 140
Tiara (Cerithiopsis), Watson. Monts. Jour. de Conch., 274, 1874; Jour. Linn. Soc., xix, 92, 1885.
= C. diadema, Watson, ... 169
Tibialis (Euthymia), Jouss. Bull. Soc. Mal. France, pt. 3, p. 266, t. 4, f. 19, 1884, ... 178
Tomochilus, Gemmellaro. Giorn. Sci. Nat. Palermo., xiii, 182, 1879, ... 114
Torresi (Cerithium), E. A. Smith. Zool. Voy. Alert, p. 66, t. 5, f. O, 1884, ... 136
Torticulus (Triforis), Dall. Bull. Mus. Comp. Zool., ix, p. 82, 1882, ... 191
Torulosus (Murex), Linn. Syst. Nat.
= Cerithium, Brug. 125, 147
Touranmense (Cerithium), Eydoux & Soul. Voy. Bonite., p. 601, t. 39, f. 3, 5, 1852. = C. carbonarium, Phil. . . 133
Traillii (Cerithium), Sowb. Thes. Conch., ii, p. 871, f. 173, 174, 1855, ... 135
Tricarinata (Cerithidea), Hutton. New Zealand Journ. Sci., i, p. 477, 1883, ... 165
Tricarinatum (Cerithium), Pse. Zool. Proc., p. 433, 1860, . 154
Tricolor (Mastonia), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 258, t. 4, f. 13, 1884, ... 186
Triforis, Desh. Basterot, Bord., 61, 1824, . . 120, 122, 177
Trilineatum (Cerithium), Phil. Moll. Sicil., ii, p. 163, t. 11, f. 13. = C. terebrale, C. B. Ad. 174
Triliratus (Triforis), Desh. Conch. Reunion., p. 102, t. 11, f. 27, 28, 1863. = T. incisus, Pease. 190
Triserialis (Triforis), Dall. Bull. Mus. Comp. Zool., ix, p. 84, 1882, ... 191
? Tristis (Triphoris), Hinds. Ann. Mag. N. Hist., 16, 1843, . 191
Tristoma, Blainv. Desh. Encyc. Meth., iii, 1053, 1825.
= Triforis, Desh. 120
Tristoma (Cerithium), Blainv. Malac., t. 20, f. 3, . . . 187
Triticea (Triforis), Pse. Zool Proc., p. 433, 1860, . . . 191
Trituba, Jouss. Bull. Soc. Mal. France, Pt. 3, p. 235, 1884.
= Triforis, Desh. 122
Trochiforme (Cerithium), Sowb. Reeve, Conch. Icon., sp. 132, 1865, ... 140
Truncatum (Cerithiopsis Stejnegeri, var.?), Dall. Proc. Nat. Mus. 304, 1886, ... 171
Tuberculare (Cerithium), Blainv. (in part), Faune Franc., p. 157, t. 6, A, f. b, 1826. = C. perversum, Lam. . . 187
Tuberculatis (Cerithiopsis), Mont. Test. Brit., p. 270, 1803, ... 119, 168

PAGE.
Tuberculata (Cerithiopsis), Carpenter. Mazat. Cat., 442, 1857. = C. tubercularis, Mtg. var. 169
Tuberculata (Cerithium vulgatum, var.), Phil. Moll. Sic., i, p. 193, t. 11, f. 6, 1836. = Var. Bourguignati, Locard. . 126
Tuberculatum (Cerithium), Blainv. (not Lam.) Faune Franc., p. 154, t. 6, f. 5, 1821. = C. rupestre, Risso. . . . 126
Tuberculatum (Cerithium), Blainv. (not Linn.). Faune Franc., t. 6, A, f. 5, 1826. = C. rupestre, var. strumaticum. . . 126
Tuberculatum (Cerithium), Born (not Linn.). = C. Bornii, Sowb. 133
Tuberculatum (Cerithium), Linn. Edit. xii, 12, 13, 1767. Locard, Ann. Soc. Agric., Lyon, 184, 1885. ? = C vulgatum, Brug. 125
Tuberculatum (Cerithium), Linn. Syst. Nat., No. 544, . . 133
Tuberculatum (Cerithium), Reeve. Conch. Icon., sp. 21, 1865. = C. patiens, Bayle. 134
Tuberculatus (Triforis), Pse. Zool. Proc., p. 776, 1870, . . 191
Tuberculiferum (Cerithium), Pse. Amer. Journ. Conch., v, p. 76, 1869. = C. echinatum, Lam. 124
Tuberculoides (Cerithiopsis), Carp. Mazat. Cat., 442, 1857. = C. tubercularis, Mtg. var. 169
Tuberosum (Cerithium), Sowb. Thes. Conch., ii, p. 855, t. 178, f. 49, 1855. = C. Erythræonense, Lam. 123
Tuberosus (Murex), Dillw. Desc. Cat. = Cerithium nodulosum, Brug. 122
Tubifer, Piette. Bull. Soc. Geol. Fr., xiii, 1856, . . . 120
Tubulus (Cerithium), Dkr. Mal. Blatt., xviii, p. 152, 1871, . 144
Turbonilloides (Bittium), Tenison-Woods. Roy. Soc. Tasmania, p. 39, 1878, ... 158
Turrita (Carithidea), Stearns. Bost. Proc., xv, p. 24, 1873, . 164
Turritella (Cerithium), Anton. Verzeich., p. 64, 1839, . . 144
Turritella (Cerithium), Quoy. Voy. Astr., iii, p. 131, t. 55, f. 8, 1834, ... 163
Turritelliformis (Bittium), Angas. Zool. Proc., p. 174, t. 26, f. 14, 1877, ... 154
Turris-Thomae (Cerithium), d'Orb. Moll. de Cuba, ii, p. 155, t. 33, f. 10, 12, 1853. = Triforis intermedius, C. B. Ad. . 188
Turris-Thomae (Triforis), Chemnitz. Conch. Cab., xi, 310, 1795, 188
Turritum (Cerithium), Sowb. Thes. Conch., ii, p. 860, f. 101, 1855, ... 147
Tympanotonus, Klein. Ostracol. 30, 1753, . . . 116, 159

Umbonatum (Cerithium), Sowb. Thes. Conch., ii, p. 859, f. 95, 1855. = C. eburneum, Brug. 129
Uncinatum (Cerithium), Gmel. Syst. Nat., p. 3542, No. 57, . 127
Undulatum (Cerithium), Sowb. Thes. Conch., ii, p. 881, f. 248, 1855, ... 166

PAGE.

Unicarinatum (Cerithium), Metcalfe. Zool. Proc., p. 73, 1851.
= Cerithidea Charbonnieri, Petit. 164
Unilineatum (Cerithium), Pse. Zool. Proc., p. 432, 1860, . 138
Uranus (Cerithium), Bayle. Journ. de Conch., p. 251, 1880.
? = C. morus, var. bifasciatum. 134
Ustum (Cerithium), Homb. & Jacq. Voy. Astr. & Zelei., v, p.
100, t. 23, f. 18, 19, 1854, ... 136

Validum (Cerithium), C. B. Ad. Panama Cat., p. 157.
= Cerithidea Montagnei, Orb. var. 161
Variabile (Cerithium), C. B. Ad. Bost. Proc., ii, p. 5, 1848.
= C. ferrugineum, var. versicolor. 140
Varicosum (Cerithium), Sowb. Gen. of Shells, No. 42, f. 5.
= C. fortiusculum, Bayle. 161
Variegata (Cerithium Latreillii, var.), Monts. Conch. Medit.,
p. 121, 1884, ... 151
Variegatum (Cerithium), Foliu. Fonds de la Mer., i, p. 135, . 145
Variegatum (Cerithium), Menke. Mal. Blatt., xviii, 126.
= C. rupestre, Risso. 126
Variegatum (Cerithium), Quoy. Voy. Astr., iii, p. 129, t. 55,
f. 17, 1834. = C. morus, Lam. var. 134
Variegatus (Triforis), A. Ad. Zool. Proc., p. 277, 1851.
= T. Arthuri, Jouss. 190
Varium (Bittium), Pfr. Archiv. für Naturg., p. 256, 1840, . 152
Ventricosa (Cerithiopsis bilineata, var.), Brus. Bull. Mal. Ital.,
iv, p. 5, 1871, ... 168
Ventricosum (Cerithium), Anton. Verzeich., p. 66, 1839, . 144
Ventrosula (Triforis), Dunker, 1881. Jouss. Soc. Mal., 227,
1884, ... 191
Venustula (Triforis), Dkr, 1881. Jouss. Bull. Soc. Mal. Fr.,
227, 1884, ... 190
Verrucosum (Murex), Renieri. B. D. D. Moll. Rouss., 202.
= Cerithium rupestre, Risso. 126
Verrucosus (Triforis), Ad. & Rve. Voy. Samarang., p. 45, t.
11, f. 32, a, b, 1850, ... 179
Versicolor (Cerithium), C. B. Ad. Contr. Conch., p. 119,
1850. = C. ferrugineum, Say. var. 140
Versicolor (Cerithium), Phil. Zeitsch. für Malak., p. 20, 1848, 144
Vertagus (Cerithium), Linn. Syst. Nat. Edit., xii, 1225, . 149
Vertagus, Klein. Ostracol., 31, 1753, ... 114, 145
Vestalis (Triforis), A. Ad. Zool. Proc., p. 278, 1851, . . 191
Vibex (Strombus), Gmel. Syst. Nat. Edit., xiii, 3522.
= Vertagus asper, Linn. 148
Vicaria, d'Archiac, 1854, ... 117
Vicinum (Cerithium), C. B. Ad. Contr. Conch., p. 122, 1850, 158
Violaceum (Cerithium), Quoy. Voy. Astr., iii, p. 134, t. 55,
f. 22, 23, 1834, ... 182

PAGE.
Viriola, Jouss. Bull. Soc. Mal. France, Pt. 3, p. 238, 1884, 122, 189
Vitreus (Triforis), Hinds. Ann. & Mag., xi, p. 19, 1843, 122, 188
Vittata (Cerithium algicola, var.), Morch. Mal. Blatt., xxiii, p. 115, 1876, ... 129
Vittatum (Cerithium), Sowb. Thes. Conch., ii, p. 874, f. 194, 1855. = C. morus, var. bifasciatum. 134
Vittatus (Triforis), Hinds. Ann. & Mag., xi, p. 17, 1843, . 189
Vulgaris (Vertagus), Schumacher. Nouv. Syst., 228, 1817. = C. vertagus, Linn. 149
Vulgatissima (Rissoa), Clark. Brit. Mar. Test., p. 375, 1875. = Bittium reticulatum, Da Costa. 150
Vulgatum (Cerithium), Brug. Enc. Meth., No. 13, . . 125
Vulpinus (Triforis), Hinds. Ann. & Mag., xi, p. 19, 1843, . 183

Watsoni (Cerithium), Jeffr. Zool. Proc., p. 56, t. 6, f. 6, 6a, 1885. = C. gemmatum, Watson. 150
Whiteavesii (Cerithiella), Verrill. Proc. Nat. Mus., p. 375, 1880. = C. gracilis, Jeffreys. 151, 176

Xanthum (Bittium), Watson. Challenger Exped., xv, p. 557, t. 38, f. 6, 1886, ... 157
Xystica (Inella), Jouss. Bull. Soc. Mal. France, Pt. 3, p. 247, t. 4, f. 8, 1884, ... 185

Yucatecanum (Bittium), Dall. Bull. Mus. Comp. Zool., ix, p. 90, 1882, ... 158

Zebrum (Cerithium), Kien. Coq. Viv., p. 71, t. 25, f. 4, . 138
Zonalis (Lampania), Brug. Dict., No. 30, . . . 118, 167

Family *LITTORINIDÆ*

Animal (Pl. 40, fig. 74.) Proboscis wide and short; tentacles long, cylindrical, with eyes on small swellings at their outer bases; foot anteriorily truncate. Penis well developed, behind the right tentacle; reproduction oviparous or ovoviviparous. Radula long and narrow, 2·1·1·1·2 (Pl. 40, fig. 66.)

Shell spiral, turbinate or globular, not nacreous; aperture oval-rounded, entire, lip simple, columella thickened, flattened. Operculum (Pl. 40, fig. 75) corneous, paucispiral. The Littorinidæ have been monographed by Reeve, in Conchologia Iconica, vol. x, and by Küster and Weinkauff, in the Conchylien Cabinet.

Synopsis of Genera.

Genus LITTORINA, Fér. 1821.

Shell imperforate, turbinate, usually thick; aperture rounded, outer lip acute, columella rather flattened.

Foot obtuse behind, longitudinally divided, so that in walking each side advances alternately. The species inhabit the sea, brackish, or sometimes even fresh water, and are mostly littoral, feeding on algæ. Some of the species are the food of man in Europe, and they are also extensively gathered for bait. The lingual ribbon of the periwinkle is two or three times the length of the body of the animal; its canal passes from the back of the mouth under the œsophagus for a short distance, then turns up on the right side, and terminates in a coil resting on the plaited portion of the gullet; it contains about 600 rows of teeth.

The best-known species, *L. littorea*, is very abundant on the coasts of Northern Europe, and is also rapidly extending its area on our New England shores, where it appears to have been recently introduced. 1900 tons of this mollusk are sold annually in the London market, employing a thousand persons in gathering it. It is extensively distributed by English fishermen over the oyster beds, in order to keep them clear of sea-weed.

This and other large species are in a great measure amphibious, living on rocks and grasses where they are washed by the high tide: they will consequently withstand deprivation of water for a period; and several specimens of a West Indian species existed for over a year in my cabinet.

About 150 species have been generally admitted, inhabiting all parts of the globe. Fossil, they are rather numerous, commencing

with secondary forms: there are also some older fossils of somewhat problematical position, which may perhaps belong in the family.

Section LITTORINA (sensu stricto.)

Turbinate, thick, with moderate spire and acute apex. L. LITTOREA, Linn.

Section MELARAPHE, Muhlfeldt, 1828.

Shell rather thin, conical, with pointed spire; surface with revolving sculpture, and usually variegated with brilliant colors. Tropical and subtropical. L. SCABRA, Linn.

Littorinopsis (Beck), Mörch. 1876, is a synonym.

Section NERITOIDES, Brown, 1827.

Shell short, turbinate or subglobose, spire very short, with obtuse apex; solid, inner lip much thickened and excavated. L. OBTUSATA, Linn.

Neritrema, Recluz, is a synonym.

Section LAMELLILITORINA, Tryon.

Whorls crossed by lamellæ, like Scalaria. L. ALBICANS, Metcalfe.

Section LÆVILITORINA, Pfeffer, 1886.

Chitinous, scarcely chalky, fragile, rimate; lip thin, sharp, the extremities united by a thin callus; epidermis smooth.

L. CALIGINOSA, Gld. *Antarctic Sea.*

Section PELLILITORINA, Pfeffer, 1886.

Thin, imperforate, brownish, with rounded hairy whorls, columellar callus weak, peristome thin, acute. L. SETOSA, Smith.

Antarctic Sea.

Section AQUILONARIA, Dall., 1886.

Paludiniform, thin, membranous, imperforate, smooth, under a rough shaggy epidermis. Operculum paucispiral, with a raised subspiral rib on the inner side.

Animal (Pl. 40, fig. 73) much like *Littorina*, with entire sole, tissues soft and gelatinous, with a profusion of tenacious mucus; no jaw; phytophagous; mantle-edge plain, no opercular appendages; oviparous. A. TURNERI, Dall.

Labrador, and Arctic Ocean, north of Bering's Strait.

?Genus PORTLOCKIA, de Koninck, 1881.

Turbiniform, imperforate; spire somewhat elevated; whorls convex, with fine spiral ribs, some becoming larger on the last whorl; mouth oval, lip and columella thin.

10 species. Devon. to Carb.; *Europe*. P. PARALLELA, Phil.

?Genus RHABDOPLEURA, de Koninck, 1881.

Conical, height and diameter about equal; whorls 4–5, slightly convex, rapidly enlarging, the last more than half the total length, spirally ribbed; aperture transversely rounded, the inner lip somewhat callous, curved, and thickened below. R. SOLIDA, de Kon. Carboniferous.

Genus CREMNOCONCHUS, Blanford, 1869.

Shell perforate, turbinately globose, spirally ribbed; aperture subovate, margin simple, columella scarcely callous. Operculum partly calcareous.

Animal small, with short, thick proboscis, and long tentacles, with eyes on swellings at their base, foot short and rounded at the extremities, mantle margin finely crenulated. Dentition similar to *Littorina*. Found in *India*, upon rocks wetted by fresh water. C. SYHADRENSIS, Blanf.

First described as *Cremnobates*, Blanford; preoccupied in ichthyology.

Genus TECTARIUS, Valenc., 1833.

Usually imperforate, turbinated or subconical, tubercular or muricate, periphery frequently angular or biangular; aperture striate within, columella callous, subdentate at the base. Operculum paucispiral, with a broad membranous border. The animal is like *Littorina:* radula seven times the length of the shell, according to Quoy. *Tropical.*

T. PAGODUS, Linn.

It is *Pagodus*, Gray, 1839, *Pagodella*, Swains, 1840. I am also compelled to unite with this group, as synonyms, *Nina*, Gray, 1850, and *Echinella*, Swainson, 1840; their characters being very variable, and shading into those of the type.

?Subgenus BRACHYTREMA, Morris and Lycett.

I have described this form in Cerithiidæ (see p. 113), but its resemblance to the present group is also very marked.

Genus PURPURINA, d'Orb, 1850.

Shell narrowly perforate, turbinate, ventricose, thick, whorls rounded, channeled at the suture, longitudinally ribbed, spirally striate; aperture oval, subchanneled in front, columella arcuated, lip simple. P. Bellona, d'Orb. (Pl. 40, fig. 78.) Jurassic.

Genus MODULUS, Gray, 1840.

Narrowly umbilicated, top-shaped, solid, grooved or ribbed and tuberculate; columella grooved, ending below in a sharp tooth. Operculum multispiral. Animal with long, cylindrical tentacles, bearing eyes at about half their length, mantle margin fringed, foot truncate in front, attenuated behind. M. tectum, Gmel. There are about a half dozen species, living in warm seas. Dentition, Pl. 40, fig. 71.

Genus RISELLA, Gray, 1840.

Shell trochiform, with flat whorls, angular periphery and concave base, imperforate; aperture rhomboidal, lip simple, usually brown-margined within. Operculum paucispiral.

Eyes on short peduncles at the base of the tentacles. Dentition, Pl. 40, fig. 67. R. melanostoma, Gmel.

Australasia.

Subgenus Peasiella, Nevill, 1884.

Shell umbilicated or perforate. Operculum concentric, multispiral. R. tantilla, Gould.

Polynesian, Indian.

Subgenus Plesiotrochus, Fischer, 1878.

Imperforate, elongately conic, whorls numerous; aperture subrhomboidal, smooth within, prolonged into a short canal below, lip subrostrate in the middle. R. Souverbiana, Fischer.

New Caledonia.

Subgenus Limnotrochus, E. A. Smith, 1880.

Umbilicated, conic, spirally ridged, aperture smooth within, the outer lip oblique, basal margin broadly sinuated, columella somewhat reflected, united to the lip above by a callosity. 2sp.

Lake Tanganyika, E. Africa (fresh water).

Scarcely separable from the preceding except by its different habit and locality. R. Thomsoni, E. A. Smith.

? Genus CYCLOCHEILA, Conrad.

Pyramidal; aperture circular; labrum expanded, columella flattened, subangular at the base; periphery angular.

A doubtful little tertiary shell from *South America;* probably fluviatile.

Genus LACUNA, Turton, 1827.

Shell turbinated or globular, thin, covered by an epidermis; aperture semilunar, columella flattened, with a parallel groove behind it ending in the umbilicus, lip sharp, arcuated. Operculum paucispiral (fig. 77.)

Animal (Pl. 40, fig. 76.) Proboscis short, tentacles long, thread-like, with eyes nearly sessile at their outer base, foot truncate in front, attenuated behind, operculigerous lobe with a long filament on either side. Dentition (Pl. 40, fig. 68.)

Spawn vermiform, thick, semicircular. Range low water to 50 fathoms. The Lacunæ feed upon sea weed, and the animal takes on the color of its food-plant.

Temana (Leach), Gray, 1847, is a synonym.

North Atlantic.

L. PALLIDULA, DaCosta. Fossil, tertiary; a single Triassic species.

Section LACUNA (sensu stricto.)

L. PUTEOLUS, Turton.

Section EPHERIA, Leach, *fide* Gray, 1847.

Shell thin, usually with spiral colored bands; spire rather elevated; inner lip thin, sharp, umbilical fissure linear. L. VINCTA, Turton.

Section MEDORIA, Leach, *fide*, Gray, 1842.

Conical, solid, with elevated spire, peritreme dilated, anteriorly reflected; inner lip thick, flattened, umbilical fissure obsolete. L. CRASSIOR, Mont.

Section HERSILIA, Monts, 1872.

The paper in which this group was published is inaccessible to me; I am therefore unable to give the diagnosis.

L. MEDITERRANEA, Monts. *Mediterranean.*

Section LACUNARIA, Conrad, 1866.

Ovate-conoidal or subglobose, thin, with delicate, close spiral lines; aperture entire, angulated posteriorly, margins disunited, columella flattened, with a long groove descending from the umbilicus. Eocene; *United States* and *France*. L. ALABAMENSIS, Whitfield (Struct. & Syst. Conch., t. 69, f. 34.)

Section HALOCONCHA, Dall, 1886.

Depressed, heliciform, few whorled, thin, with a strong epidermis, lip thin, with narrow reflexed margin in the adult, continuous with the thin, sharp, unreflected arcuate columella; umbilicated.

L. REFLEXA, Dall, *Alaska*.

It is *Lacunella*, Dall (not Desh), and *Lacunaria*, Dall (not Conrad.)

Section MEGALOMPHALUS, Brusina, 1871.

Shell naticiform, with short spire, normal apex, and rounded whorls, thin, minute, with a wide, plicate umbilicus. Operculum spiral.

L. AZONA, Brusina. *Mediterranean Sea*.

The species of this group were first described under *Fossarus*, from which they differ in apex, sculpture and operculum. Fischer considers *Megalomphalus* a member of the family Adeorbiidæ.

Section STENOTIS, A. Ad., 1863.

Shell compressed, elongately ovate, auriform; spire short, acute; whorls flattened, the last solute; aperture oblong, narrow behind, margin continuous, acute; umbilicus patulous, its margin angulate.

L. LAXATA, A. Ad. *Japan*.

Section CITHNA, A. Ad., 1863.

Shell shaped like *Lacuna*, but without epidermis(?); apex truncated or flattened, umbilicus defined by a ridge.

Tentacles ciliated. L. TENELLA, Jeffreys. *Europe, Japan*. *Hela*, Jeffreys, 1870, is a synonym.

Subgenus LACUNELLA, Desh, 1861.

Shell oval, thin, pellucid, shining, apex obtuse; aperture large, dilated, with thin, expanded margin; columella narrow, thin, concave, divided by a narrow channel, scarcely perforate at the base. L. DEPRESSA, Desh. (Struct. & Syst. Conch., t. 69, f. 36.) Eocene; Paris basin.

Subgenus SPIRONEMA, Meek, 1864.

Shell ovate; whorls rounded, and separated by a rather deep suture; aperture ovate, lip thin, continuous; columella not thickened, perforated by a very small umbilicus; surface with revolving lines and furrows. L. TENUILINEATA, Meek and Hayden (Struct. & Syst. Conch., t. 69, f. 35.) Cretaceous. *Nebraska.*

FAMILY *FOSSARIDÆ.*

Head proboscidiform, with a median longitudinal sulcus; tentacles thread-like, sharp, grooved; eyes at their external base; two frontal lobes between the tentacles; foot obtuse at both ends.

Central tooth of the radula (Pl. 40, fig. 72) with a triangular, finely dentate cusp; lateral tooth transverse, with a strong cusp and a series of fine denticulations its entire length; marginals elongated, simple.

Shell turbinated, rather solid, white, grooved or ribbed spirally; aperture entire, lip simple, undulated, columella nearly straight. Operculum corneous, subconcentric or subspiral.

Genus FOSSARUS, Phil., 1841.

Shell perforate, subglobose, spirally ribbed, spire rather short, last whorl large; aperture semicircular, columellar margin nearly straight, outer lip rounded, undulated. Operculum concentrically grooved.

The nucleus of the shell is sharp, subcylindrical, of several whorls, caducous.

Animal having two frontal lobes.

About fifty living species have been enumerated; there are four fossil species, miocene of *Europe.* F. AMBIGUUS, Linn.

Maravignia, Aradas & Maggiore, 1841, is a synonym.

Section PHASIANEMA, S. Wood, 1842.

No frontal lobes.? Shell clathrate. F. SULCATUS, S. Wood, *Mediterranean* and pliocene.

Clathrella, Recluz, 1864, is a synonym.

Section ISAPIS, H. & A. Adams, 1854.

Shell umbilicated, spire elevated, cancellated, or with revolving ribs; columella with a small median tooth, sometimes obsolete, outer lip crenulated, interiorly grooved. *West Indies, Muratlan.* F. ANOMALA, Adams.

Section COUTHOUYIA, A. Adams, 1860.

Shell ovate, profoundly, widely rimate; spire acuminated; whorls convex, decussated, with impressed suture; aperture semi-ovate; inner lip straight, dilated in front, outer lip arcuate, simple. *Japan.* F. DECUSSATUS, A. Ad.

Section CONRADIA, A. Adams, 1860.

Turbinate, rimately umbilicated, spire somewhat elate; whorls convex, concentrically carinated; outer lip fimbriated, inner lip not dentate; umbilicus margined by a semilunar rib. F. CINGULIFERUS, A. Ad.

Japan.

Section GOTTOINA, A. Adams, 1863.

Shell spirally ribbed, solid, imperforate. F. SULCIFERUS, A. Ad.

Japan.

Section TUBA, Lea, 1833.

Shell conical, umbilicated; whorls rounded, cancellated; aperture rounded, margin not continuous above, columella thickened and reflected at the base. F. ALTERNATUS, Lea. Eocene.

Alabama.

Subgenus FOSSARIOPSIS, Laube, 1870.

Distinguished from *Fossarus* by its closed umbilicus, and the callous expansion of the inner lip. F. RUGOSO-CARINATUS, Klipst. Triassic.

Subgenus RAULINIA, Mayer, 1864.

Imperforate, rather thin, oval-oblong, spirally sulcate; outer lip simple, inner lip curved, with a central tooth. F. ALLIGATA, Desh. Miocene. F. BADIA, Tenison-Woods, is a recent Australian species.

Subgenus IPHITUS, Jeffreys, 1883.

Imperforate, conical, with spiral rows of tubercles, apex composed of a styliform process of several whorls, closely striated lengthwise; aperture rounded, entire, with simple lip. Operculum corneous, paucispiral. I. TUBERCULATUS, Jeffreys.

N. Atlantic O.

Genus FOSSARINA, Ad. & Ang., 1863.

Auriform, a little depressed, narrowly umbilicated, spire short; aperture oval, oblique, lips rounded. Operculum multispiral. F. PATULA, Ad. & Ang.

Australia.

Genus ATRESIUS, Gabb, 1869.

Elongated, spire elevated, whorls rounded; aperture ovate, slightly produced in front, outer lip entire, thin, columella not callous; imperforate; surface marked by spiral ribs. A. LIRATUS, Gabb. Cretaceous.

California.

Possibly belongs in Cerithiidæ.

No recent illustrated monograph of Fossaridæ has been published. Dr. Fischer printed a systematic Catalogue of the Species, with synonymy, in "Journal de Conchyliologie," for 1864.

Family *PLANAXIDÆ.*

Shell oval conic, spire elevated, without varices; columella flattened, truncate anteriorly, lip rounded, simple, notched in front. Operculum corneous, subspiral.

Animal with rather long rostrum, subulate tentacles and eyes on swellings at their base.

The Planaxidæ have been monographed by Sowerby, in Conchologia Iconica, XX.

Subfamily PLANAXINÆ.

Siphon very short, foot simple. Shell spirally grooved. Dentition (Pl. 40, fig. 69.)

Subfamily LITIOPINÆ.

Animal (Pl. 40, fig. 79.) No siphon, foot with three cirriform filaments, operculigerous lobe with two posterior filaments. Dentition (Pl. 40, fig. 70.) Shell minute, thin, smooth, plicate or spirally striate.

Planaxinæ.

Genus PLANAXIS, Lamarck, 1822.

Shell imperforate, oval-conic, solid, with epidermis, and elevated spire, usually spirally sulcate; columella callous, flattened, truncate at base, with a narrow sinus; interior of aperture ridged, base notched. Operculum paucispiral, with a nearly terminal nucleus.

Amphibious, crawling on stones near the margins of pools left by the retiring tide, or adhering to mangrove roots. About fifty species are known, tropical or subtropical. Fossil; pliocene of the *West Indies.* P. SULCATUS, Born.

Section HINEA, Gray, 1847.

Shell smooth, covered by an epidermis; whorls flattened; outer lip thick, sillonated within. P. BRASILIANUS, Lam.

Subgenus QUADRASIA, Crosse, 1886.

Shell smooth, spirally striated, imperforate; peristome thickened, the margins joined by a strong parietal callus, columella dilated with a rounded obtuse tubercle at the base, base of aperture emarginate. Operculum thin, corneous, paucispiral, the apex almost terminal. Fluviatile. Q. HIDALGOI, Crosse.

Philippines.

Perhaps more nearly related to Melanopsis.

Subgenus QUOYIA, Desh, 1830.

Conically elongated, apex decollated, whorls solid, flattened, spirally striated, mouth notched in front, grooved within, columella smooth, truncate in front, with a posterior spiral plication. P. DECOLLATUS, Quoy.

Fissilabra, Brown, 1836, and *Leucostoma*, Swains, 1840, are synonyms.

Subgenus HOLCOSTOMA, H. & A., Adams, 1853.

Shell thin, covered with a bristly epidermis, aperture with a posterior produced canal, with an anterior sinus, columella concave, with a posterior callus. P. PILIGERUS, Phil.

Indian Ocean.

Litiopinæ.

Genus LITIOPA, Rang, 1829.

Shell minute, conoidal, columella truncate at the base, outer lip simple, thin, notched in front. Operculum spiral.

Animal (Pl. 40, fig. 79) with three cirriform filaments on each side, operculigerous lobe with two posterior appendices, no siphon.

To ascend through the water this little pelagic animal emits an air bubble enclosed in a glutinous secretion, which draws out a thread as it rises, and finally attaches itself to floating sea weed. *Bombyxinus*, Belanger, 1834, is a synonym. L. MELANOSTOMA, Rang.

Subgenus ALABA, A. Ads., 1862.

Shell ovate-conical or elongated, subdiaphanous, whorls plicate or varicose, apex submammillate, columella often truncated, oper-

culigerous lobe with four filaments, tentacles obtuse at their extremities, the right one much longer.

A. PICTA, A. Ad. About 25 species.

Japan, Australia, Mazatlan, West Indies.

Subgenus DIALA, A. Adams, 1862.

Shell spirally striate, not varicose, sometimes a little nodulous around the middle, columella nearly straight, not truncate, lip simple. 5 sp.

Philippines, Australia, Japan.

D. VARIA, A. Ad.

(Subgenus STYLIFERINA, A. Ad., 1860.)

This group I have included in Eulimidæ (Manual, viii, 286); but Mr. Adams, in 1862, regarded it as a member of the Litiopidæ, in which opinion he has been followed by Watson and others. I introduce the group again, in order to include some new species by Watson, which may possibly really belong in Litiopidæ.

? FAMILY *GIRAUDIDÆ.*

Characters those of the following genus.

Genus GIRAUDIA, Bourg., 1885.

Shell oval, spire conoid, transparent, polished, without epidermis, last whorl extending upwards at the aperture half way upon the penultimate; aperture oval, superiorly angular, with a trace of a sinus, columella short, robust, enlarging below, peristome strongly thickened; imperforate. Operculum unknown. G. PRÆCLARA, Bourg. Fresh water. *Lake Tanganyika, Africa.*

As neither animal nor operculum are known, the only characters are those of the shell–which is unfigured. Bourguignat is unable to assimilate the group with any previously-known family.

Genus REYMONDIA, Bourg., 1885.

Shell oval-conoidal, more or less elongated, reddish chestnut color with a lighter sutural band, smooth, polished, without epidermis; last whorl slightly ascending at the aperture, then shortly deflected at the insertion of the strongly-thickened patulous lip, which is without external rib, columella with a longitudinal-curved ridge; no umbilicus. Operculum unknown. R. HOREI, Smith.

Lake Tanganyika.

Genus LITTORINA, Fer., 1821.

Section Littorina (sensu stricto.)

L. GRANDIS, Middendorff. Plate 41, fig. 80.

Solid, whorls a little concave round the upper part, smooth or obsoletely keeled, spirally striated towards the apex; bluish grey, the keels more or less interruptedly banded with chocolate, edge of lip with a few chocolate spots. Length, 40 mill.

Sea of Ochotsk.

L. SQUALIDA, Brod. & Sowb. Pl. 41, fig. 81.

Solid, slightly striate, greenish grey, with narrow chestnut bands, outer lip with chestnut markings, columella white, last whorl ventricose, a little concave above. Length, 1 in.

New Zealand.

L. LITTOREA, Linn. Pl. 41, figs. 82–85.

Solid, smooth, spirally striated, sometimes impressed round the upper part of the whorls; dark brown, olivaceous, yellowish or reddish, usually spirally lineated with a darker shade, interior of aperture chocolate brown. Length, 25–40 mill.

Europe; Northern Coast of United States (introd.).

This is the common edible periwinkle of Europe, which of late years has been observed as an inhabitant of the rocky coasts of the New England States, spreading southward with wonderful rapidity. The name periwinkle is supposed to be a corruption of petty winkle or whelk, in contradistinction to the whelk or winkle proper, which is *Buccinum undatum*. The extent to which this mollusk is consumed is indicated by the late Dr. Jeffreys, who states that in the Billingsgate Market of London, about 65,000 bushels are sold annually. They are also utilized in keeping oyster beds free of seaweed. Fig. 82 represents an abnormally-shouldered specimen.

The synonyms include *L. vulgaris*, Sowb., and *L. ustulatus*, Lam.

L. SITCHANA, Phil. Pl. 41, figs. 86–91; Pl. 45, fig. 12.

Subglobose, moderately solid, strongly spirally ridged, usually with subequal intervening furrows; dark chocolate color, often with a broad white peripheral band, interior chocolate.

Length, 15–18 mill.

Vancouver's Isl., northward; Japan and north coast of Asia.

This is very close to *L. rudis*, Donov., with which it has been identified by some of the Californian conchologists, and very possibly it is a variety of that species; but it appears to vary constantly

in being much thinner, with coarser sculpture. The coloring varies to greenish grey, orange-yellow or reddish, the lighter colors often without a band; one variety is white, with a broad chocolate band

The synonyms include *L. Kurila* and *L. subtenebrosa*, Middend., *L. cincta*, Gould=*L. Gouldiana*, Weink., *L. castanea*, Ads. & Reeve, *L. rudis*, Cooper, *L. tenebrosa*, Schrenck, *L. Mandschurica*, Schrenck (fig. 86), a depressed variety.

Var. BREVICULA, Phil. Figs. 89, 90, 12.

Whorls somewhat slopingly flattened above, the last with from 3 to 5 spiral ribs, and smaller, more numerous ones on the base, the principal ribs subnodulous; olivaceous or brownish, variegated and strigated with white.

L. balteata, Reeve, and *L. Souverbiana*, Crosse (fig. 90), are synonyms.

North China.

Var. ALEUTICA, Dall. Fig. 91.

Spire depressed, the nodules on the ribs more developed..

Aleutian Is.

L. RUDIS, Donovan. Pl. 41, figs. 92–4.

Shell very solid, with short, sharp spire, smoothish, usually spirally linearly grooved; whitish, varying to orange-red, with sometimes a lighter or darker peripheral band; columella callous, flattened. Length, 15–22 mill.

Northern Europe and North Coast of the United States.

L. zonaria, Bean, and *L. simplex*, Reeve (fig. 96), from Cape Verd Is., are synonyms.

A very unstable species, as the following varieties testify:

Var. OBLIGATA, Say. Fig. 94.

Whorls more convex and thinner, spirally obsoletely ridged; columella broadly dilated, aperture a little produced below.

Greenland, New England.

L. castanea, Desh., *L. sulcata* and *L. Grœnlandica*, Menke, *L. incarnata*, Lovén, *L. costulata*, Midd., and *L. litorea*, Fabr., are synonyms.

Var. NIGRILINEATA, Gray. Fig. 95.

The engraved lines black.

Var. JUGOSA, Mont.

Smaller than usual, with strong, sharp spiral ridges, variable in number, and sometimes alternately larger and smaller.

Perhaps not distinct from Var. *obligata*.

Var. PATULA, Thorpe. Figs. 98–100.

Somewhat auriformly expanded, thinner; spire not prominent, placed somewhat obliquely; mouth wide.

England.

L. labiata, Brown, is a synonym.

Var. SAXATILIS, Johnston. Fig. 97.

Thinner, whorls more convex, subglobose, small, tessellated with olivaceous brown and white. Length, 9–12 mill.

In deferance to European authority, I include this as a variety of *L. rudis*, but it appears to me to be very distinct from that form, whilst it certainly shades gradually into the variety below.

L. neglecta, Bean, is a synonym.

Var. TENEBROSA, Montg. Figs. 1–4.

Thin, whorls rounded, with elevated spire; brownish or yellowish; usually tessellated with white. Length, 9–12 mill.

See remarks under foregoing variety.

L. vestita, Say., and *L. marmorata*, Pfr., are synonyms.

L. LITTORALIS, Linn. Pl. 41, figs. 5–8.

Rather solid, globosely ovate, with low pointed spire, whorls not very convex, suture scarcely impressed, surface smooth; yellowish, brownish, or brownish red, often with a faint, finely tessellated pattern, sometimes spirally banded or lineated. Length, 9–12 mill.

Lapland, Norway, Greenland, New England.

L. littoralis has usually been considered synonymous with *L. obtusata*, Linn., but I agree with Dr. Jeffreys in referring it to the species known in America as *L. palliata*, Say. It does not appear to occur on the British Coasts.

L. arctica, Moll. (figs. 6, 7), *L. limata*, Lovén, *L. tenebrosa*, var. *obtusata*, Midd. (fig. 5), are synonyms.

L. VENTRICOSA, Phil. Pl. 41, fig. 9.

Rounded oval, spirally engraved, sometimes granulated; whitish, with pale red streaks; columella excavated, and with aperture, flesh color. Length, 18 mill.

Pulo-Penang.

L. PORCATA, Phil. Pl. 41, fig. 10.

Umbilicated; coarsely spirally ribbed; bluish white, the excavated columella and interior of aperture chocolate color.

Length, 7 mill.

Galapagos Is.

Section MELARAPHE, Muhlf., 1828.

L. SCABRA, Linn. Pl. 42, figs. 18–20.

Rather thin, slantingly convex, somewhat coarsely spirally striated, periphery angulated and carinated, suture linearly channeled; yellowish or greyish, punctate or nebulously spotted, or interruptedly or continuously obliquely strigate with chocolate, interiorly similarly marked, with the color intensified on the inner margin of the lip. Length, 1–1·5 in.

Mazatlan, Sandwich Is., Viti Is., Philippines, China, Indian Ocean.

Including its varieties, this species stretches nearly around the world, extending from West Africa around to Arabia; but it has not been detected in the Mediterranean Sea.

The synonymy of the typical form embraces *L. angulifera*, Lam., *L. ahenea*, Reeve (in part), the vars. *rubra*, *suturalis*, *lutea*, *flammulata*, *articulata*, *punctata* (fig. 20), *ventricosa*, of Philippi, var. *concolor*, Weink., var. *tenuis*, Nevill.

Var. LINEATA, Gmel. Pl. 42, figs. 11–13, 15–17.

Thin, imperforate, finely, closely spirally striated, suture narrowly channeled, body whorl with rounded or scarcely angulated periphery, not carinated; yellowish or greyish, tessellated or obliquely irregularly strigate with chocolate, sometimes with a series of large chocolate spots next the suture. Length, 1·25 in.

West Coast of Africa, West Indies, Florida.

The history of the nomenclature of this variety or quasi-species is somewhat complicated. It was at first confounded by both Linnæus and Lamarck with the Polynesian form, which differs in being somewhat more coarsely striate with a carinate periphery. Subsequent authors, in distinguishing the species, have restricted Lamarck's species to the West Indian form, notwithstanding the significance of his name for it, and the fact that the only figure he refers to, as well as his description, clearly indicate the *L. scabra* of Linn. I have concluded to adopt for the present variety Gmelin's name, which appears to me to have been clearly intended for it.

L. scabra, of d'Orb. (figs. 12, 13), *L. ahenea*, Reeve, in part (fig. 11), perhaps *L. aurea*, Bonnet (fig. 17), described without locality, and the forms described by Philippi as vars. *flavescens*, *rubra* (fig. 16), *strigata* (fig. 15), belong here.

Var. INTERMEDIA, Phil. Plate 42, figs. 21–24.

Shell smaller, narrower, with engraved spiral lines, tessellated with chestnut and white, periphery angulated or carinated.

Length, 15–20 mill.

Sandwich Is., Central Polynesia, Ceylon, China.

To this are to be added vars. *articulata*, *punctata*, *strigata*, of Phil., var. *minor*, Weink., *L. Sinensis*, Phil. (fig. 23), *L. Newcombii*, Reeve (fig. 24), *L. Novæ-Hiberniæ*, Lesson.

Var. FILOSA, Sowb. Pl. 43, figs. 31, 31a; Pl. 42, figs. 25–30.

Whorls encircled by more or less distant thread-like ridges, and usually showing intermediate striæ; color sometimes pale, without variegated markings, sometimes strigated or tessellated, as in the type.

Japan, Philippines, Polynesia.

The synonyms of this variety include *L. pallescens*, Phil. (fig. 30), *L. arboricola*, Reeve (fig. 25), *L. Sieboldi*, Phil. (fig. 26), *L. Philippiana*, Reeve (fig. 27), *L. cingulata*, Phil. (fig. 29), *L. subcingulata*, Nevill, *L. carinifera*, Menke (fig. 28), *L. perdix*, King, *L. lævior*, Nevill.

Var. NEBULOSA, Lam. Pl. 43, fig. 38; Pl. 42, fig. 14.

Shell much thicker, ashy yellow, more or less nebulous, or with chestnut punctations, strigations or zigzag lines, densely spirally striate, periphery slightly angulated, aperture light yellowish.

Length, 1–1·25 in.

West Indies.

L. tigrina, d'Orb. (fig. 14), is possibly a synonym.

L. UNDULATA, Gray. Pl. 43, figs. 39–41.

Rather solid, smooth or spirally striate, yellowish or ashy white, with undulating chestnut strigations, sometimes tessellated or dotted, or suffused with chestnut or chocolate, with large white spots forming a row at the suture and another at the periphery; aperture yellowish, chestnut or violaceous, often with the markings of the exterior, columella flattened, violaceous. Length, 1 in.

Viti Is., Japan, Philippines, Java, Ceylon, etc.

Distinguished at once by its solidity and violet columella.

The synonyms include *L. conica*, Phil. (fig. 41), and its vars. *deliastula* and *subintermedia*, Nevill.

L. FLAMMEA, Phil. Pl. 43, figs. 34–36.

Narrow, thin, whorls slightly convex, the last with obscurely or distinctly angulated periphery, closely spirally striate; yellowish, tessellated or with zigzag markings of chestnut. Length, 20 mill.

China.

Thinner and narrower, and without the violet columella of the preceding species. In the form figured by Reeve as *L. Fortunei* (fig. 35), the peripheral angle is less prominent. *L. luteola*, Quoy. (fig. 36), also appears to be a synonym.

Our museum possesses specimens from Port Natal, South Africa, probably referable to this species.

L. ABERRANS, Phil. Pl. 43, fig. 32.

Thin, slender, with rounded whorls and deep suture, finely spirally striated, plicately decussated by growth lines; flesh white, the ridges opaque, lip and columella thinly reflected, tinged with violet; subperforate. Length, 18 mill.

Panama.

Described from a single specimen in the Cumingian collection. The locality has not been verified. Looks as much like a Bulimus as a Littorina.

L. STRIGATA, Lischke. Pl. 43, fig. 33.

Inflated, somewhat solid, spirally striate; yellowish, with interrupted chestnut spiral lines, forming oblique strigations.

Length, 9·5 mill.

Japan.

Distinguished by its short, bulbous form.

L. MELANOSTOMA, Gray. Pl. 43, figs. 42, 43.

Rather thin, whorls flattened, obliquely, obscurely subrugose, spirally distantly engraved, periphery angulated; straw color, with usually a longitudinal pattern of short, numerous, chestnut lines extending from sulcus to sulcus, either all over the surface or discontinued at the periphery; columella dark chocolate.

Indian Ocean, Ceylon, Java, Singapore.

Nevill has indicated a var. *articulata*, (fig. 43).

L. COLUMELLARIS, d'Orb. Pl. 43, figs. 37, 51; Pl. 44, fig. 79; Pl. 45, figs. 14, 15.

Stout, convex, thick, closely spirally striate, whitish, yellowish, purplish white or rust color, aperture light yellowish, columella excavated, flattened, violaceous. Length, 1 in.

West Indies, Brazil.

Frequenily named *L. Mauritiana*, Lam. in American collections; that, however, is a Polynesian and Australasian species, smaller, with chestnut or chocolate aperture having a white band near the base.

It is *L. Sayi*, Phil. not Reeve.

Var. FLAVA, Brod. Fig. 51.

Spiral sculpture stronger, one or two of them more prominent on the periphery, which thus becomes angulated.

Rio Janeiro.

L. Cubana, Weink. (figs. 79, 14, 15). is possibly a connecting link between this variety and the type of the species: it is evidently poorly figured, and I cannot identify any of our shells with it.

L. VARIA, Sowb. Pl. 43, figs. 44–46.

Rather thick, ventricose, convex, closely slightly striate, varying to cord like spiral ridges; yellowish white, spirally lineated with chestnut, often broken up into tessellated markings, and these frequently gathered into irregular oblique strigations, interior edge of lip spotted with chestnut. Length, 1·25 in.

Peru, Panama, Mazatlan.

The synonymy includes *L. fasciata*, Gray. (fig. 45), *L. variegata*, (fig. 46), *L. costulata*, Souleyet, and probably *L. bicarinata*, Gray.

L. PULCHRA, Sowb. Pl. 43, fig. 47.

Ventricose. a little flattened round the top of the whorls, densely spirally striate, thick, yellowish brown, with irregular oblique chocolate strigations, interior similarly colored. Length, 1·5 in.

Panama.

L. IRRORATA, Say. Pl. 43, figs. 48, 49, 50.

Whorls flattened, the last a little constricted above, swollen below, thick, spirally costulate; yellowish white, more or less clouded with light purple, apex purplish, the striæ bearing numerous minute chestnut dots, columella tinged with orange color, outer lip with chestnut marginal spots. Length, 1 inch.

Southern Coast of the United States, from Texas and Florida northward to Atlantic City, N. Jersey; Costa Rica, West Indies, Brazil.

It is only of recent years that this species has appeared so far northward as Atlantic City, where it was first detected by Mr. John Ford of Philadelphia. It is *L. Sayi* of Reeve (fig. 49), not Phil. *L. exarata*, Phil. (fig. 50).

L. SULCULOSA, Phil. Pl. 43, fig. 52.

Rather thin, whorls flatly convex above, spirally obtusely ribbed, with intervening broad grooves, periphery angulated; fawn color, ribs sometimes stained with livid purple. Length, 20 mill.

North Australia.

L. OBESA, Sowb. Pl. 43, fig. 53.

Solid, smooth, shining, very finely spirally grooved, periphery obtusely angulated, suture sometimes margined; flesh color or nearly white, aperture and columella orange-brown, the latter sometimes purplish. Length, 18–22 mill.

Sandwich and Viti Is., Philippines, Australia.

It is *L. coccinea*, Martyn, *L. limax.* (Mart.) Gray.

L. MAURITIANA, Lam. Pl. 44, figs. 71, 70–75.

Ash colored, often with a suffused or narrow darker band round the middle, smooth, or minutely spirally striated, periphery obtusely angulated, columella and aperture chestnut colored, the latter with a white band near the base. Length, 20–23 mill.

Mauritius, N. Zealand, Australia, Lord Howe's Isl.

L. laevis, Reeve, (fig. 72), "not Phil."=*L. pseudolaevis*, Nevill, *L. laevis*, Phil. (for I think Reeve's figure represents Phillippi's species), *L. unifasciata*, Gray, *L. Diemenensis*, Quoy, (fig. 73), *L. antipodum*, Phil. *L. Africana*, Reeve, not Phil. (fig. 75), *L. acuta*, Menke, *L. penitaria*, Wood, *L. luctuosa*, Reeve, (fig. 70), and *L. cincta*, Quoy, (fig. 74), are synonyms.

L. RUFA, Recluz. Pl. 43, fig. 54 (enlarged).

Rather solid, minute, slightly umbilicated, smooth, polished, orange brown, indistinctly banded with chestnut; aperture small, lip thick.

Hab. unknown.

Described by Reeve from a specimen named by Recluz, in the Cumingian collection; dimensions not given.

L. STRIATA, King. Pl. 44, figs. 58, 59.

Subglobose, whorls convex, rapidly enlarging, spirally sharply striate; ashy grey or brownish, aperture chocolate color with an inferior light band; columella widely excavated, chocolate above and below, flesh color in the middle. Length, 15–18 mill.

Azores, Cape Verd and Canary Is. Guinea.

It is *L. globosa*, Dkr. (fig. 59), *L. Canariensis*, d'Orb., *L. arenicola*, (Nutt.) Dunker, *L. affinis*, d'Orb.

L. PLANAXIS, Nuttall. Pl. 43, figs. 55, 56; Pl. 44, fig. 57.

Whorls convex, rapidly increasing, smooth or very minutely spirally striate, light chocolate color, shining, under a thin olivaceous epidermis, speckled and spotted irregularly with white, interior chocolate color, with a white band near the base; columella broadly excavated, yellowish brown.

California, Lower California.

The young shells are often beautifully variegated with bands and tessellations of chocolate and white, but these colorings rarely persist in the adults. Fig. 57 represents (enlarged) one of these young shells, described by Philippi under the name of *L. picta*, with a variety *marmorata*.

L. ambigua, Reeve (fig. 56) and *L. patula*, Gould are also synonyms.

L. PUNCTATA, Gmel. Pl. 44, figs. 60–64.

Ventricose, rather thin, smooth, polished, very minutely spirally striate, periphery obtusely angulated, last whorl a little concave below it; olive brown, tessellated with white, aperture chocolate colored, with an inferior white band. Length 12–15 mill.

West Africa, Mediterranean Sea.

The synonyms are *L. guttata*, Reeve (fig. 61), *L. Syriaca*, Phil.

Var. FRASERI, Reeve. Figs. 62, 63.

Livid purple, very minutely, numerously dotted.

West Africa.

Var. PULCHELLA, Dunker. Fig. 64.

Spirally engraved, flesh color, with purplish dots, interior chocolate.

West Africa, Teneriffe.

L. MELEAGRIS, Beck. Pl. 45, fig. 10.

Smooth, thin, flesh color or ashy, closely, usually regularly reticulated with chocolate, forming oblique series.

Length 8 mill.

West Indies.

L. guttata Phil. and *L. punctata*, Pfr. are synonyms.

L. AFRICANA, Krauss. Pl. 44, figs. 66, 65, 67–69.

Ash colored, smooth, spirally engraved, periphery angulated, aperture chocolate, with an inferior white band.

Length 10 Mill.

Cape of Good Hope, Natal.

L. decollata, Krauss (fig. 67) is a synonym; and perhaps *L. leucosticta*, Phil. (fig. 69), described without locality, is another.

Var. KNYSNAENSIS, Krauss. Figs. 65, 68.

Shell very minutely, elosely dotted with rust color.

L. picea, Reeve (fig. 68) is a synonym.

L. NOVÆ-ZELANDIÆ, Reeve. Pl. 44, figs. 76, 77.

Globosely turbinated, whorls rounded, with deep suture, irregularly spirally grooved, white or yellowish white, longitudinally marked with faint chestnut; interior of aperture chestnut color, with a white band near the base, columella violet tinted.

Length 19 mill.

New Zealand, Solomon Is.

L. melanacme, Smith (fig. 77), from the Solomon Is., is probably identical. Nevill changed the name to *L. erronea*, because he was convinced that the species does not come from New Zealand.

L. PERUVIANA, Lam. Pl. 44, fig. 78.

Whorls smooth, dark chocolate color, with zigzag longitudinal white markings, aperture chocolate color. Length 22 mill.

Central America to Chili.

Nevill has indicated, without description, a var. *nana*.

L. ASPERA, Phil. Pl. 44, figs. 80–85; Pl. 45, fig. 87.

Coarsely, sharply, spirally ribbed, whitish, longitudinally lineate with chestnut, columella and aperture chocolate or chestnut color.

Length 16 mill.

Panama to Mazatlan.

L. puncticulata, Phil. (fig. 83), and var. *fortisulcata*, Nevill are synonyms. *L. irrorata*, Reeve (fig. 87), said to come from Sitka, can probably be added.

Var. CONSPERSA, Phil. Figs. 82, 80–83.

Thinner, the spiral sculpture closer and flatter, whitish, sometimes with spiral series of chestnut dots, interior light chestnut.

Typical specimens of this variety and of *L. aspera* appear very different in texture, sculpture and coloring, but in large series intermediates are not uncommon.

L. albida, Phil. (fig. 81) and *L. modesta*, Menke (fig. 80), are synonyms.

Var. PHILIPPII, Carpenter. Fig. 84.

Obliquely strigate with greyish chocolate.

Var. PENICILLATA, Carpenter. Fig. 85.

Small, flatly, closely spirally striate; ash color, with irregular longitudinal chestnut lines and two distant bluish spiral lines.

Length 6 mill.

Cape St. Lucas, L. Cal.

L. PINTADO Wood. Pl. 44, fig. 86; Pl. 45, fig. 88.

Yellowish white or greyish, smooth or slightly, closely, spirally striate, whole surface covered by very minute, close chestnut dots, aperture yellowish chestnut with darker spiral lines.

Length, 16–24 mill.

Sandwich Is.

The synonyms are *L. serialis*, Souleyet, *L. ambigua* and *L. tenebrata*, Nuttall, (fig. 88).

L. PAYTENSIS, Phil. Pl. 45, figs. 90, 91, 95, 96.

With distant engraved lines, and angulated periphery, whitish, punctate with chestnut and with an obsolete chestnut band, aperture chestnut color, with two pale bands. Length, 12 mill.

Payta, Peru.

I am not acquainted with this species, *L. Araucana*, d'Orb. (figs. 95, 96), is probably identical.

L. CINGULIFERA, Dunker. Pl. 45, fig. 97.

Obsoletely spirally, engraved, white or ash color with spiral chestnut lines, aperture bluish, with chestnut lines. Length, 12 mill.

Guinea, W. Africa.

L. SCUTULATA, Gould. Pl. 45, figs. 98–3.

Faintly striate with spiral impressed lines, olivaceous chestnut or chocolate color, including aperture, sometimes not variegated, but usually with longitudinal zigzag white markings, sometimes broken up into spots, and frequently with an articulated white and chestnut band on the periphery. Length 9–12 mill.

Washington Territory to *Southern California.*

The variations of this beautiful species are too numerous for description: several of them have received names; such as *L. plena*, Gould, (fig. 1), *L. lepida*, Gld. (fig. 2), *L. pullata*, Carp. (fig. 3).

L. TESSELLATA, Phil. Pl. 45, fig. 89.

Shell rather thin, whorls convex, the last very obtusely angulated on the periphery, closely lineately grooved and finely tessellated

with square light chestnut and white spots, aperture and columella light purplish, the former showing the exterior markings.

Length 18 mill.

West Indies.

Rather a rare form, more inflated than those which follow. It is possible that *L. tigrina*, d'Orb. doubtfully referred to *L. scabra*, var. *nebulosa* (p. 243), should be placed here. *L. tigrina*, C. B. Ad. (Mörch), and *L. undulata*, d'Orb. are synonyms.

L. ZICZAC, Chemn. Pl. 45, figs. 5–7, 92.

Sculpture varying from smooth to spirally striate, periphery from obtusely angulated with slightly convex whorls to strongly carinated with nearly flat whorls, stout or slim; white, with a bluish cast and zigzag longitudinal chestnut lines, the latter sometimes faint (generally so in large specimens), but often stronger and closer, the blue clouding intensified on the middle of the body whorl, and the whole appearance thus becoming much darker, as though forming the ground color, with the strigations white; aperture light or dark chocolate or bluish, often with a light band near the base, sometimes with a second superior light band. Length 10–25 mill.

West Indies, Florida, Brazil.

The light colored, larger variety, with very obtuse angle, is usually known in American collections as *L. lineata*, Lam. *L. debilis*, Phil. (fig. 7) is a half-grown one, and *L. glabrata*, Phil. (fig. 92), said to be from Payta, Peru, is full-grown. *L. d'Orbigniana*, Phil. may be added.

Of the darker colored and more angulated forms, the wide, stumpy specimens have been distinguished as *L. floccosa*, Beck, and *L. glaucocincta*, Beck, *L. cingulata*, Pfr. *L. Riisei*, Mörch are synonyms; whilst the narrower forms (typical *ziczac*) include *L. angustior*, Mörch, and its var. *fasciata*, *L. carinta*, d'Orb and *L. Jamaicensis*, Ads.

L. PUSILLA, Phil. Pl. 45, fig. 8.

Decollated, slightly spirally striate, bluish white, with dark chestnut longitudinal, oblique lines; last whorl obsoletely carinated; aperture chocolate color, with a basal white band, and variegated outer lip. Length, 5 mill.

Sandwich Is.

L. COLUMNA, Jonas. Pl. 45, fig. 9.

Solid, closely spirally striated, whorls rounded, the last with deep suture and without carina; whitish, with longitudinal chestnut

strigations, interior violaceous, with a wide yellowish band, lip maculated within. Length, 16·5 mill.

Hab. unknown.

Described from a single specimen.

L. MINIMA, Gray. Pl. 45, fig. 11.

Slightly umbilicated, smooth, white, with scattered small chocolate spots. Length, 5–8 mill.

West Indies.

L. NERITOIDES, Linn. Pl. 45, fig. 13; Pl. 46, fig. 18.

Whorls smooth, slightly impressed round the upper part, olivaceous grey, with a central chocolate band, aperture chocolate color, with a white band at the base. Length, 5–7 mill.

Southern Europe, Madeira.

The synonymy includes *L. cærulescens*, Lam. *L. Basterotii*, Payr. *L. elegans*, Risso, *L. glabrata*, Pfr. *L. melanostoma*, Kryn. *L. Petræus*, Mtg. *L. saxatilis*, Olivi, *L. tricolor*, Risso, and Var. *pauperecula*, Monts.

L. thersites, Reeve (fig. 18), said to come from the coast of Chili and Peru does not appear to possess any distinctive characters; the locality needs confirmation, and may be regarded as very doubtful.

L. MESPILUM, Muhlf. Pl. 45, figs. 16, 17.

Smooth, solid, subglobose, with more convex whorls than in the preceding species; chestnut colored, often with a darker band, aperture chestnut, without band; umbilicus frequently subrimate.

Length, 5–7 mill.

West Indies.

L. fusca, Pfr., *L. Gundlachi*, Phil., and *L. naticoides*, Orb. (fig. 17), are identical.

L. ACUMINATA, Gould. Pl. 46, fig. 19.

Solid, shining, livid with darker flames or interrupted strigations, often maculated with white on the periphery and at the suture; whorls 6, planulate, the last subangulate, with spiral striæ; columella tinted with mulberry color. Length, 7·5 mill.

Mangsi Isl., Sooloo Sea.

Section NERITOIDES, Brown, 1827.

L. OBTUSATA, Linn. Pl. 46, figs. 20–22, 23.

Subglobose, with scarcely elevated spire, whorls flattened, suture not deep, last whorl a little tumid above, compressed on the side,

thick, imperforate, smooth, or obscurely engraved-striate; light yellowish to dark chocolate color, sometimes with two bands.

Length, 12 mill.

Northern Europe.

It is *L. littoralis*, Forbes & Hanley, *L. retusa*, Lam., *L. ustulatus*, Blainv., *L. neritiformis*, Brown.

Var. L. FABALIS, Turton. Fig. 22.

Light yellowish red, closely reticulated or zigzagged with darker lines. Scarcely deserves to be distinguished as a variety, as many of the darker colored specimens of the full-grown *L. obtusata* very indistinctly preserve these markings.

L. Beanii, Macgill., and *L. vittata*, Phil., are the same.

Var. ÆSTUARII, Jeffreys. Fig. 23.

Smaller, with more elevated spire, uniform greenish brown, the aperture chestnut color. Length, 10 mill.

Near Sutton, and at Manningtree, Suffolk, England.

Inhabits between tide marks in brackish water. In deference to Dr. Jeffreys' opinion, I quote the species here, but specimens received from him, appear to me to be rather allied to *L. littoralis* than to this species.

L. UMBILICATA, d'Orb. Pl. 46, fig 24.

Smooth, or with a few spiral striæ anteriorly; blackish or bluish black. Length, 1·5 mill.

Peru and Bolivia.

Evidently a very young shell; its mature characters it would be unsafe to surmise.

Section LAMELLILITORINA, Tryon, 1887.

L. ALBICANS, Metcalfe. Pl. 46, figs. 25, 26.

Whorls rounded, spirally linearly grooved, obtusely keeled at the suture, last whorl lamellarly varicose, thin, semitransparent; white, purple tinted towards the apex, filleted with chestnut at the keel, lip thinly reflected. Length, 22 mill.

Sarawak, Borneo.

L. ARDOUINIANA, Heude. Pl. 46, fig. 28.

Spirally striate, thin, epidermis marbled with white, body whorl with several longitudinal lamellæ. Length, 20 mill.

Along, Tonquin.

Described as a doubtful Leptopoma, and by Mr. Crosse, referred to Littorina; very possibly a variety of *L. albicans*.

L. TENUIS, Phil. Pl. 46, fig. 27.

Very thin, thinly spirally striate, whorls often tumid above, then flattened, with obtusely angulated periphery; whitish with faint angular longitudinal chestnut lines, epidermis yellowish, obliquely, faintly lamellar. Length, 14 mill.

Ins. Ticao, Philippines.

Section LÆVILITORINA, Pfeffer, 1886.

L. CALIGINOSA, Gould. Pl. 46, fig. 29.

Smooth, or with slight incremental striæ, thin, epidermis chestnut color or olivaceous brown, sometimes maculated with yellow; whorls 4–5, ventricose, with deep suture; interior livid or chestnut colored.

Length, 5 mill.

Terra del Fuego; South Georgia.

L. VENUSTA, Pfeffer. Pl. 46, fig. 30.

Inconspicuously rimate, thin, olivaceous corneous, three banded with chestnut, with a very thin epidermis; whorls 4½, with deep suture; aperture bluish-ash color, with bright purplish bands.

Length, 5·6 mill.

South Georgia.

L. GRANUM, Pfeffer. Pl. 46, fig. 31.

Rimate, thin, slightly longitudinally, and distantly, obscurely, spirally striate, light corneous, under a membranaceous yellowish epidermis; whorls 4½, the last a little inflated; aperture corneous.

Length, 1·6 mill.

South Georgia.

L. PYGMÆA, Pfeffer. Pl. 46, fig. 32.

Strongly pitted-umbilicate, thin, chitinous, with thin longitudinal plications and spiral indistinct striæ, reddish brown, under a thin epidermis of the same color, columella violaceous, outer lip black-margined. Length, 2 mill.

South Georgia.

L. UMBILICATA, Pfeffer. Pl. 46, fig. 33.

Very distinctly umbilicated, thin, with a peripheral carina and a distant one above it, longitudinal sculpture obsolete, epidermis very thin, smooth, ochry olivaceous; whorls 5, convex, suture strongly coarctate; interior light chestnut color. Length, 3 mill.

South Georgia.

The specific name is preoccupied by d'Orbigny for a doubtful species.

L. HISSEYANA, Tenison-Woods. Pl. 46, fig. 35.

Narrowly rimate, spirally striate, thin, greyish, yellowish or orange-red, apex violaceous, sometimes with a broad darker peripheral band. Length, 3 mill.

Tasmania.

L. PALUDINELLA, Reeve. Pl. 46, fig. 36.

Subglobose, thin, horny, with impressed suture, smooth, olivaceous chestnut, aperture yellowish chestnut, columella excavated.

Length unknown; figure magnified.

Tasmania.

Section PELLILITORINA, Pfeffer, 1886.

L. SETOSA, E. A. Smith. Pl. 46, figs. 37, 38.

Imperforate, thin, yellowish corneous, epidermis stout, olivaceous brown, with numerous short erect hairs disposed in longitudinal and spiral series; whorls over 5, decussated beneath the epidermis; interior pearl colored. Length, 14 mill.

Kerguelen Isl.

L. PELLITA, Marts. Pl 46, figs. 39–41.

Thin, greyish brown, epidermis covered by spirally arranged series of curved hairs, beneath the epidermis punctate and cancellate; whorls 4, convex, a little flattened at the suture; columella yellowish or violaceous. Length, 18 mill.

South Georgia.

Section AQUILONARIA, Dall., 1886.

L. TURNERI, Dall. Pl. 46, fig. 42.

Imperforate, very thin, white, under a tough, shaggy, brownish epidermis, which, near the aperture, forms the entire substance of the shell. Length, 14 mill.

North Labrador; Arctic Ocean, north of Behring's Strait.

Unfigured and doubtful Species of Littorina.

L. VIDUA, Gould. *Japan.*
L. VARIA, Hutton. *New Zealand.*
L. LUNATA, H. C. Lea. *Cape May, New Jersey.*
L. BLANFORDI, Dunker. *Rockhampton, Australia.*
L. APICINA, Menke. *Mazatlan.*
L. PARVULA and L. PHASIANELLA, Phil. *Panama.*
L. BECCARII, Canefri. *Papuan Is.*
L. PULCHELLA, Ad. (= L. ADAMSI, Reeve.) *Jamaica.*

Belongs to the Trochidæ.

Genus CREMNOCONCHUS, Blanford, 1869.

C. SYHADRENSIS, Blanford. Pl. 46, fig. 47.

Subcovered-perforate, with elevated spiral ribs, with the interstices decussated by smaller spiral liræ and incremental striæ, epidermis olivaceous brown; whorls 3, rapidly increasing, the last angulated round the umbilicus. Length, 7 mill.

Western Ghats, near Bombay, India.

C. CONICUS, Blanford. Pl. 46, figs. 44–46.

Imperforate, solid, whitish, often with a chestnut band above the periphery, epidermis olivaceous, not shining, suture deep; whorls 5, convex, the last subangulate at the periphery; aperture fulvous or whitish, often banded. Length, 8–9·5 mill.

Torna, near Poona, India.

L. Fairbanki, Blanford (fig. 45), appears to be a synonym.

Var. CANALICULATUS, Blanford. Fig. 46.

Suture channeled, the whorls acutely carinate at the top.

Var. EDECOLLATA, Nevill.

Stoliczka considered *C. conicus* a variety of the next species, and Nevill believes this probable.

C. CARINATUS, Layard. Pl. 46, fig. 43.

Subperforate, solid, whitish, with a chestnut band above the periphery, carinated at the periphery and suture, with a sutural channel; whorls 5, rapidly increasing; aperture whitish, chestnut banded. Length, 7·5 mill.

Mahableshwar, India.

The preceding species, perhaps, ought to be united with this.

Var. GIGANTEA, Nevill.

Bombay Presidency, India.

Genus TECTARIUS, Val., 1833.

T. PAGODUS, Linn. Pl. 47, fig. 48.

Spirally tubercularly ribbed, the tubercles in oblique longitudinal series, last whorl encircled by two spinose carinæ, those of the spire by one, yellowish white, often stained with chestnut brown, or the spiral sculpture lineated with that color; columella white, slightly tuberculated below, aperture ridged within.

Length, 2·5 in.

Australia, Moluccas, Ceylon, Zanzibar.

T. bicolor, Lam., is a synonym.

T. BULLATUS, Martyn. Pl. 47, figs. 49–51, 53, 58.

Shell thicker than the preceding species, imperforate, spinose-papillary upon spiral ribs, the interstices closely spirally lirate, suture often channeled by the exsertion of a row of spines above it; whorls often somewhat angulated by the greater prominence of a pair of peripheral nodulous ribs; cream white, reddish tinged towards the summit; columella toothed below, aperture lirate within. Length, 1·5 in.

Indian Ocean, Australia, Polynesia.

T. grandinatus, Chemn., *T. papillosus*, Lam., *T. coronatus*, Val., and vars. *vera*, *subinermis*, *rustica*, *quadriseriata* and *elegans*, of Phil., are synonyms. *T. spinulosa*, Phil. (fig. 58), is a juvenile.

Var. CORONARIA, Lam. Fig. 53.

Shell longer, the spines shorter and smaller.

Connects insensibly with the type, although formerly considered a distinct species.

T. TECTUM–PERSICUM, Linn. Pl. 47, fig. 52.

Spiny tubercles larger, more compressed, blunter than in *T. bullatus*, usually fewer spiral series; cream color, often lineated with chestnut. Length, 30 mill.

Zanzibar, Madagascar, Mauritius.

Notwithstanding its more rugose appearance, I think it probable that this will prove to be a mere variety of *T. bullatus*.

T. CUMINGII, Phil. Pl. 48, fig. 73.

Deeply umbilicated, umbilicus defined by an angle, encircled by spinose ribs, of which two are very prominent on the body whorl and one on the spire, irregularly granularly lirate between them, flesh color, interior light orange-brown, not ridged, columella not toothed. Length, 22 mill.

Philippines, Polynesia.

The type of Gray's section Nina. It is *T. echinulatus*, Kiener.

T. ARMATA, Issel. Pl. 47, fig. 54.

Imperforate, thick, solid, spirally granularly costate, with a peripheral series of compressed spines, appearing on the whorls of the spire, yellowish white, aperture lirate within, columella subdentiform below. Alt. 14 mill.

Two of the figures of *T. tectum-Persicum*, in Küster's Monograph of Littorina, refer to this species.

Suez.

T. TECTIFORMIS, Watson. Pl. 47, fig. 55.

Umbilicated, with longitudinal plications, small at the suture, then becoming evanescent, but reappearing more prominently at the periphery, where they become tubercles on the carina, vanishing on the flattened base, peripheral carina visible on the spire-whorls, whole surface covered by fine, unequal spiral threads; yellowish white. Length, ? 22·5 mill.

Japan; 565 fms.

The apex and base of the single specimen obtained were broken. Watson is not certain of the generic position of this shell, which was obtained by the Challenger Expedition.

T. MURICATUS, Linn. Pl. 48, fig. 68.

Imperforate or rimate, solid, yellowish or greyish white; whorls rounded, a little flattened below the suture, encircled by close series of granules, the series either in juxtaposition or with intermediate spiral striæ; aperture light chestnut color, usually smooth within, or very faintly ridged. Length, 1 in.

West Indies, Bahamas, Florida.

This species has been known to live about a year in a cabinet, deprived of its native element.

T. NODULOSUS, Gmel. Pl. 47, figs. 59–64; Pl. 48, figs. 72, 74, 75.

Bluish grey, spirally striate, whorls biangulate in the middle, the angles tuberculated, usually yellowish white, aperture and columella chestnut or chocolate color, the former often obsoletely banded, base of aperture a little produced. Length, 18 mill.

North Carolina, Bahamas, West Indies, Ceylon, Philippines, Australia, New Zealand, Marquesas.

T. dilatatus Orb. (fig. 60), *T. tuberculatus*, Menke, *T. thiarella*, Anton. (fig. 59), *T. trochiformis*, Phil., *T. nodulosus*, d'Orb., not Gmel., *T. tuberculatus*, Gray (fig. 74), *T. Antoni*, Phil., *T. scabra*, Anton., are all synonyms referring to the American form, generally known as *T. dilatatus;* whilst the oriental examples have been heretofore known as *T. nodulosus* (fig. 75), with *T. trochoides*, Gray (fig. 61), *T. vilis*, Menke (fig. 64), *T. Malaccana*, Phil. (fig. 63), *T. sunilifera*, Soul. (fig. 62), *T. pyramidalis*, Quoy. (fig. 72), and *T. trochiformis*, Dillw., as synonyms. My sufficient justification in uniting species with such distant habitats, and no intermediate localities, is that it is impossible to distinguish them by any character.

T. MONTROUZIERI, Fischer. Pl. 47, figs. 56, 57.

Thick, whitish, light flesh color near the suture, spirally cingulate and longitudinally costate, the intersections forming close series of nodules; aperture sulcate within, basal margin plicate, columella white, subdentate at the base. Length, 10 mill.

New Caledonia.

T. NODOSUS, Gray. Pl. 47, figs. 66, 65, 67; Pl. 48, figs. 83–86.

Spirally striate, with three spiral ribs, which are more or less nodose, yellowish or greyish, sometimes indistinctly banded or marbled with chestnut, the ribs, in fresh specimens, chocolate colored, interrupted by the white tubercles, interior chestnut or chocolate color, light-banded at the base. Length, 18–21 mill.

Indo-Australian, South Africa.

Fig. 66 represents the typical form; a more elate, worn specimen is represented in *T. subnodosus*, Phil. (fig. 65.)

T. Natalensis, Krauss (fig. 67), and *T. lemniscata* Phil. (fig. 86), are also synonyms.

T. MILIARIS, Quoy. Pl. 48, figs. 78, 76, 71, 82, 77, 69.

Short ovate, closely spirally striate, the striæ nodulous above the rounded periphery, bluish grey, mottled with greyish white, columella and aperture chocolate color, the latter with a basal white band. Length, 13 mill.

Ascension Isl., Viti Is., Australia.

T. echinatus, Anton., *T. granocostatus*, Reeve (fig. 82), *T. Feejeensis*, Reeve (fig. 76), and perhaps the doubtful *T. reticulatus*, Anton (fig. 71), of unknown habitat, are synonyms.

Var. GRANOSUS, Phil. Pl. 48, fig. 77, 69.

Subconical, whorls flattened above, with an obtuse peripheral angle, roughly granulated by longitudinal, crossed by spiral ridges, the granules smaller, in spiral series on the base, bluish grey, more or less marbled, columella and interior chestnut color or bluish.

Length, 12 mill.

Fernando Po.

Frequently narrower, and more elate than the specimen figured.

T. glans, Reeve (fig. 69), is a synonym.

T. RUGOSUS, Menke. Pl. 48, fig. 70.

Solid, imperforate, tumidly convex, spirally linearly grooved, longitudinally strongly ribbed, the intersections forming tubercles

on the upper part of the whorls, flesh white, interior yellowish, columella flesh purple. Length, 22 mill.

Mouth of Swan River, Australia.

T. GRANULARIS, Gray. Pl. 48, figs. 84, 85, 79–81; Pl. 45, fig. 4.

Ovately ventricose, closely spirally striate, the striæ minutely granose on the upper part of the whorls, yellowish white or ash colored, sometimes marbled, columella and aperture chocolate color, the latter with a white basal band. Length, 9 mill.

Loochoo and Viti Is., Red Sea, Japan.

L. millegrana, Phil. (fig. 85), *T. cinereus*, Pease (fig. 81), *T. Vitiensis*, Dunker, *T. plena*, Godeffr. Cat., *T. radiata*, Souleyet (fig. 4), *T. exigua*, Dunker, *T. ventricosa*, Phil., are synonyms.

Var. SUBGRANOSUS, Dunker. Figs. 79, 80.

Whorls slightly shouldered.

Madras.

Unfigured Species of Tectarius.

T. CECILLEI, Phil.	*Loochoo Is.*
T. LUTRA, Gould.	*China Sea.*
T. RUBRA, Anton.	*Hab. unknown.*

Genus MODULUS, Gray, 1840.

M. TECTUM, Gmel. Pl. 48, figs. 87–89.

Subperforate, inflated, tumidly convex above, with distant, rounded, oblique plications, spire depressed, suture well impressed, whole surface spirally striate, striæ often alternately larger; whitish, marbled and lineated with light chestnut, aperture white, closely ridged, sometimes chestnut margined. Diam. 28 mill.

Sandwich and Viti Is., Indian Ocean, Red Sea, Mauritius.

M. retusus, Brug., *M. obtusatus*, Phil. (fig. 89), *M. cidaris*, Reeve (fig. 87), *M. candidus*, Petit (fig. 88), are synonyms.

M. FLORIDANUS, Conr. Pl. 48, fig. 90.

Suborbicular, whorls convex above, with subnodular radiating ribs, terminating above a peripheral spiral rib; below the periphery are several spiral, subnodular ribs and equal interspaces, which are striated; whitish, with chestnut small spots on the ribs, interior white or violaceous. Diam. 15 mill.

West Coast of Florida.

M. LENTICULARIS (Chemn.), Auct. Pl. 48, figs. 91, 92.

Flattened above, with distant radiating ribs, periphery acutely carinated, defined by a rib, convex below, everywhere minutely spirally corded, spire-whorls often exserted sufficiently to show the carina; whitish, articulated with reddish chestnut.

Diam. 15–18 mill.

West Indies.

Distinguished at once from the preceding species by the flatter top, and stronger carina, It is *M. modulus*, Linn., and *M. filosus*, Helbling.

M. DISCULUS, Phil. Pl. 48, figs. 93, 94; Pl. 49, fig. 95.

Spire conical, more elevated than in the preceding species, the distant radiating ribs forming by their terminations a series of tubercles on the sharply carinated periphery; base flatly convex, with close, subnodulous spiral cords; white, tessellated with chestnut at the suture and periphery, aperture violaceous. Diam. 10 mill.

Acapulco, Mazatlan.

M. dorsuosus, Gould. (fig. 95), and perhaps *M. lividus*, Phil., are synonyms.

M. CERODES, A. Ad. Pl. 49, figs. 96, 97.

Depressed, distantly radiately ribbed, the ribs projecting at the carinate periphery, where they are cut by two or three impressed spiral lines, base with several revolving riblets, two of which are larger and tuberculate. Diam. 12 mill.

Mozambique (Cuming), *Gulf of California* (Carpenter.)

The two series of tubercles often unite into one.

M. UNIDENS (Lister), Auct. Pl. 49, figs. 98–100.

Conical, whorls flattened, obsoletely, radiately, distantly ribbed above the angulated periphery, everywhere closely spirally corded; white, the cords minutely punctate with reddish chestnut.

Diam. 15 mill.

West Indies, West Coast of N. America, Philippines, etc.

The synonymy includes *M. angulatus*, C. B. Ad., *M. Sayi* (Nuttall), A. Ad., *M. trochiformis*, Eyd. et Soul. (fig. 100), *M. perlatus*, Dillw., *M. Carchedonicus*, Lam., *M. catenulatus*, Phil.

M. MORELETI, Fischer. Pl. 49, figs. 1, 2.

Narrowly subperforate, rather thick, spirally lirate, carinate, the body whorl bicarinate; lip thick, sub-bilabiate; whitish, the upper

part radiately maculated with chestnut, the base minutely punctate. Diam. 2 mill.

New Caledonia.

Unfigured Species.

M. OBLIQUUS, A. Ad. *Red Sea.*
M. DUPLICATUS, A. Ad. *Hab. unknown.*
M. KREBSII, Mörch. *West Indies.*
M. CONVEXIOR, M. PISUM, M. CANALICULATUS, (Beck) Mörch. *West Indies.*

Genus RISELLA, Gray, 1840.

R. MELANOSTOMA, Gmel. Pl. 49, figs. 99, 3–29; Pl. 50, figs. 30, 31. Conically elevated or depressed, with rounded, somewhat tuberculated periphery on the elevated specimens, acutely carinated on the depressed ones, radiately ribbed above, or nearly smooth, spirally striate, most distinct on the base; yellowish or olivaceous brown, more or less articulated with chestnut, sometimes obliquely longitudinally strigate, aperture dark chocolate color, varying to orange brown, lip brown spotted. Length, 15 mill.

South Australia, Tasmania.

R. aurata, Quoy (fig. 6), *R. imbricata*, Gray (figs. 8, 9), *R. Kielmansseggi*, Zelebor (fig. 7), *R. vittata*, Phil. (figs. 28, 29), *R. lutea*, Quoy (fig. 3), *R. plicatula*, Phil. (figs. 24, 25), *R. cicatricosa*, Jonas (figs. 4, 5), *R. nana*, Lam. (figs. 99, 13, 14), *R. picta*, Phil. (figs. 16, 17), *R. plana*, Quoy (figs. 10, 11, 12), *R. livida*, Phil. (figs. 30, 31), *R. Australis*, Gray, *R. grisea*, Phil. (figs. 18, 19), *R. fimbriata*, Phil. (figs. 26, 27), *R. flavescens*, Phil. (figs. 22, 23), *R. Bruni*, Crosse, (fig. 15), and probably *R. crassa*, Dunker, are all synonyms.

In the range of varieties presented by this assemblage, we find the shell high, with a roundly angular periphery, or low with a sharp periphery, all degrees of development of the radiating ribs, sometimes entirely wanting, or replaced by color strigations, etc. I have endeavored, in vain, to eliminate distinct or even varietal forms, and at last put them all together. This was practically done ten years ago by Rev. J. E. Tenison Woods (Proc. Linn. Soc. N. S. Wales, i, 242, 1876), and more recently Mr. E. A. Smith (Zool. Alert Exped., p. 62), has partially concurred. The collection of specimens before me is sufficiently large and varied to give me abundant evidence in support of the Australian conchologist's

views. I retain Gmelin's name for the species, although it cannot be satisfactorily identified, because it is the oldest name, and by common consent for many years has been generally applied to one or another of the above forms.

Subgenus PEASIELLA, Nevill., 1884.

R. TANTILLA, Gould. Pl. 50, figs. 32, 33, 34.

Perforate, whorls 4–5, flattened, with carinate periphery, obliquely very finely striate, base with two spiral granular threads; yellowish ash, sometimes showing radiating, flexuous chestnut lines, aperture orange-brown. Diam. 4–5 mill.

Sandwich Is., Viti Is., Australia, Ins. Nossi-bé.

It is *Margarita angulata*, A. Ad., *Trochus diminutivus*, Reeve (fig. 34), *R. parvula*, Dunker, var. *subinfracostata*, Nevill.

R. CALEDONICA, Crosse. Pl. 52, fig. 9.

With wide funnel-shaped umbilicus defined by a carina, another carina on the periphery, a third at the suture, microscopically striate longitudinally, yellowish brown; whorls 4, angulated by the carinæ, rapidly increasing, base flatly convex. Diam. 2·25 mill.

New Caledonia.

Described as a Fossarus. It appears to differ from the other species by its wider umbilicus.

R. GAIDEI, Montr. Pl. 50, figs. 35–37.

Umbilicated, spirally striated, periphery acutely carinated and denticulate by the projection of longitudinal, rounded ribs; yellowish white, spirally articulated with brown above the periphery and on the base. Diam. 2·75 mill.

Lifou, Loyalty Is.

R. CONOIDALIS, Pease. Pl. 50, fig. 38.

Narrowly perforate; whorls flatly sloping, spirally grooved, plicately longitudinally wrinkled, undulating the carinal line, base flatly convex, finely grooved; whitish, stained with saffron yellow. Diam. 4 mill.

Paumotus.

R. ISSELI, Semper. Pl. 50, figs. 39, 40.

Umbilicated, spirally engraved above, costate on the base, upper part with low, broad, rounded undulations or ribs, modifying the carinated periphery; yellowish, articulated with brown at the suture and periphery. Diam. 2·5 mill.

Suez, Zanzibar.

R. INFRACOSTATA, Issel. Pl. 50, figs. 41, 42.

Narrowly umbilicated, minutely radiately striate above, concentrically, distantly costulate below; whorls somewhat convex, the last with peripheral carina; yellowish, maculated with brown at the suture and periphery. Diam. 2 mill.

Suez.

R. Simondi, Issel, Mss., is a synonym.

Possibly only a variety of the preceding species.

R. ROLFSTORFFIANA, Nevill. Pl. 50, fig. 43.

Narrowly perforate, nearly smooth above, suture not subimbricated, periphery rarely undulately waved; yellowish, sometimes with a dark basal zone. Diam. 3·75 mill.

Andaman Is., Mergui, Hong Kong.

R. TEMPLIANA, Nevill., and vars. NIGROFASCIATA and SUBIMBRICATA, Nevill. (unfigured.) *Andaman Is.*

Subgenus PLESIOTROCHUS, Fischer, 1878.

R. SOUVERBIANUS, Fischer. Pl. 50, figs. 44–46.

Perforate, spirally striate, rather indistinctly longitudinally ribbed, ribs low and wide, rounded, undulating the peripheral carina; aperture produced below into a short, narrow canal; yellowish white, with thread-like spiral purplish lines interrupted by the ribs and generally arranged in pairs, a purple articulated line at the suture and periphery, another on the base. Length, 7 mill.

Lifou, Loyalty Is.

Subgenus LIMNOTROCHUS, E. A. Smith, 1880.

R. THOMSONI, E. A. Smith. Pl. 50, figs. 47, 48.

Narrowly umbilicated, moderately solid; whorls 7, flattened, with a broad, deep furrow at the lower part, margined above by a keel, which is nodulous on the lower whorls, above this there are three granular spiral ridges, base with about eight ridges, and intervening finer concentric striæ; basal margin of aperture broadly sinuated, excurved and slightly effuse; livid purplish, dotted with brown, whitish at the suture and base. Length, 18 mill.

Lake Tanganyika, Africa (fresh water.)

R. KIRKI, E. A. Smith. Pl. 50, figs. 49, 50.

Narrowly umbilicated, dirty white; whorls 6 or 7, slightly concave, with arcuate, flexuous growth-lines, and 6 or 7 granular spiral

liræ, that on the periphery strongest and duplicate, base with a nearly smooth band within the peripheral liræ, then with several granular liræ round the umbilicus. Diam. 18 mill.

Lake Tanganyika, Africa.

R. CYCLOSTOMA, and R. GIRAUDI, Bourg. (unfigured.)

Lake Tanganyika.

Genus LACUNA, Turton, 1827.

Section LACUNA (sensu stricto.)

L. PUTEOLUS, Turton. Pl. 50, figs. 51, 52.

Semiglobose, slightly expanded at the base, periphery obtusely angulated, rather solid, opaque, glossy; whitish, yellowish or reddish white, sometimes trifasciate, the middle band broadest; umbilicus narrow, deep. Length, 4 mill.

Northern Europe, France, Portugal.

L. auricularis, Mont., *L. fasciata*, J. Adams, *L. parva*, DaCosta, *Helix lacuna*, Mont., *L. rufa*, Dorset. Catal., *L. Montagui*, Turton, *L. expansa*, J. Adams, *L. pallidula*, Meyer & Möbius, *L. intermedia*, Locard, are all synonyms, besides the quasi-varietal names *conica*, *lactea*, *clausa*, *expansa*, etc., of Jeffreys.

L. PALLIDULA, DaCosta. Pl. 50, figs. 53, 53a, b, 54.

Widely umbilicated, largely, obliquely expanded, rather thin, opaque, glossy; under the epidermis are growth lines and a few spiral scratches; pale yellowish or olivaceous yellow; whorls 3, 4, rapidly increasing, the last disproportionately large, suture deeply impressed. Diam. 8–9 mill.

Northern Europe, Iceland, Greenland, Spitzbergen, New England.

L. neritoidea, Gould (fig. 54), *L. patula*, Thorpe, *L. Thorpeana*, Phil., and vars. *subtriangularis*, Kobelt, and *albescens*, Thorpe, are synonyms.

L. PORRECTA, Carpenter. Pl. 50, figs. 55, 56, 57.

Larger than *L. puteolus*, with more developed spire, body whorl slopingly expanded, effuse below, thinly spirally striate upon the thin olivaceous yellow or light brown epidermis, sometimes with a pale band under the obtusely angulated periphery.

Length, 13 mill.

Vancouver's Isl. to San Diego, Cal.

Var. EFFUSA, Carpenter. Fig. 56.

Larger, more effuse, whorls more tumid with well-impressed suture. Length, 17 mill.

Var. EXÆQUATA, Carpenter. Fig. 57.

Whorls flattened, suture scarcely impressed. Length, 12·5 mill.

Section EPHERIA, Leach, 1847.

L. VARIEGATA, Carp. Pl. 50, fig. 58.

Thin, expanded in front, periphery rounded or obtusely angulated, smooth, polished, fulvous, irregularly strigate with chestnut, with frequently a peripheral band of white spots, and sometimes another below the suture. Length, 7·5 mill.

Vancouver's Isl. to San Diego, Cal.

L. BOURGUIGNATI, Rochebrune. Pl. 50, figs. 59, 60.

Ventricose, subdistorted, thick, yellowish brown, spirally lirate, longitudinally striate by growth lines, umbilicated, lip rather thick. Length, 6 mill.

Cape Verd Is.

L. DIVARICATA, Fab. Pl. 50, figs. 61, 62, 64–73, 75.

Obliquely conical, periphery obtusely angulated, somewhat thin, translucent and glossy, with slight, numerous spiral striæ; white, yellowish or yellowish brown often with four brown bands of varying width, sometimes confluent into one band, and so disposed as to exhibit a white band just below the suture. Length, 11 mill.

Northern Europe, Iceland, Greenland, New England, N. W. Coast of North America.

It will be seen from the above synonymy that the species is circumpolar in distribution. The banding is most conspicuous on young specimens, but frequently it is entirely absent.

The synonyms include *L. bifasciata*, *L. cornea* and *L. striata*, Brown, *L. fusca*, Binney (fig. 64), *L. vincta*, Mtg. (figs. 67, 68), *L. solidula*, Lovén. (fig. 69), *L. labiosa* and *L. albella*, Lovén., *L. pertusa*, Conr., *L. borealis*, Phil. (fig. 75), *L. arctica*, Phil. (fig. 73), *L. gracilior*, Metcalfe (fig. 65), a narrow, elongated form, sometimes considered a variety, var. *ecanaliculata*, Jeffreys, *L. canalis*, Mont., *L. quadrifasciata*, Mont. (fig. 66), and the following forms from the West Coast of the United States: *L. compacta*, Carp., *L. carinata*, Gould (figs. 71, 72.)

L. UNIFASCIATA, Carp. Pl. 50, figs. 63–74.

Small, glossy, generally with a colored keel, the band sometimes broken up into dots. Length, 4 mill.

California.

Var. AURANTIACA, Carp.

Orange-white, the band and keel obsolete.

Section MEDORIA (Leach), Gray, 1841.

L. CRASSIOR, Mtg. Pl. 50, fig. 76.

Stout, solid, opaque, epidermis light yellowish; whorls convex, a little tumid or round-shouldered above, epidermis thin, often gathered into obliquely longitudinal folds, under it the surface is minutely spirally striate; pillar lip flattened, expanded; imperforate. Length, 12·5 mill.

Northern Europe, Greenland, Sitka.

L. glacialis, Moller, and *L. pallida*, Donovan, are synonyms.

Section HALOCONCHA, Dall. 1886.

L. REFLEXA, Dall. Pl. 51, fig. 80.

Thin, light to dark chestnut brown, nearly smooth; whorls 2½–3, rapidly increasing, the last somewhat slantingly flattened above, inflated, suture distinct, umbilicus narrow.

Length, 10, diam. 13·8 mill.

Aleutian and Commander Is., Alaska.

L. ANTARCTICA, Martens. Pl. 51, figs. 81, 82; Pl. 46, fig. 34.

Thin, chitinous, rather widely, excavately umbilicated, thinly, subirregularly longitudinally striulate, with indistinct spiral lines, yellowish brown or chestnut color, umbilical region defined by a decided angle, and depression, interior chestnut color, with a pearly sheen. Diam. 6·8 mill.

South Georgia, Kerguelen Is.

L. pumilio, E. A. Smith (fig. 34), is probably the young of this species.

Section MEGALOMPHALUS, Brusina. 1871.

L. DEPRESSA, Seguenza. Pl. 51, fig. 83.

Minute, whorls rapidly enlarging, the last slantingly inflated, with microscopic, close-set longitudinal folds and intermediate spiral striæ, umbilicus wide, its wall flattened, aperture obliquely ovate. Length, 2 mill.

Algiers, Messina, Brindisi; 11–108 fms.

Supposed by Jeffreys to form a connecting link between Adeorbis and Fossarus.

L. AZONEA, Brusina (unfigured.) *Mediterranean Sea.*

L. Crosseana Kleciak, *L. Petitiana*, Tiberi, *L. mutabilis*, Costa, are synonyms.

L. EXCAVATA, Monts. (unfigured.) *Palermo.*

L. Monterosati, Granata, is a synonym.

Section STENOTIS, A. Ad., 1863.

L. LAXATA, A. Ad. Pl. 50, fig. 77.

Oval elongated, compressed, thin, whitish, spire small, pointed, whorls 3, flattened, rapidly increasing, the last one large, inflated, dilated in front, umbilicus large, open, defined by an angle.

Length, 2 mill.

Japan.

Section CITHNA, A. Adams, 1863.

L. TENELLA, Jeffreys. Pl. 51, figs. 84, 85.

Thin, semitransparent, glossy, without epidermis?, with a few irregular, microscopic, spiral lines on the body whorl, white, yellowish-brown at the apex, which is abruptly truncated; whorls 5, convex, gradually enlarging; aperture somewhat expanded and angulated at the base. Length, 3 mill.

N. of Hebrides Is., in 189 and 650 fms., *Mediterranean, Azores, Pernambuco, and E. of Japan;* 114–2050 fms.

Var. MARGARITIFERA, Watson. Fig. 85.

More or less strongly striated lengthwise, especially on the upper whorls.

Dr. Jeffreys thought this identical with and a synonym of his var. *costulata;* granting the identity, the Jeffreysian name should become the synonym, being latest published.

L. ADAMSI, Jeffreys. Pl. 51, fig. 86.

Thin, semitransparent, glossy, no sculpture except the umbilical ridge, white; whorls 4¼, moderately convex, rapidly increasing, with deep suture; umbilicus narrow, enclosed by a sharp ridge.

Length, 1·5 mill.

Atlantic Ocean (Porcupine Exped.).

L. CARINATA, Jeffreys. Pl. 51, fig. 87.

Thin, opaque, glossy, biangulate, base with a few slight striæ, surface appearing closely granular under the microscope, white, yellowish brown towards the apex; whorls 5–6, flattened between the suture and upper keel, as well as between the two keels of the body whorl. Length, 2·5 mill.

Atlantic Ocean (Porcupine Exped.).

L. CINGULATA, Verrill. Pl. 51, fig. 93.

Rather solid, depressed, spirally striated, biangulated, white with a brown nucleus; whorls 3, rapidly increasing, flattened above and between the carinæ; umbilicus rather narrow and deep.

Length, 2·2, diam. 3·6 mill.

Off New England Coast; 906–1467 fms.

Resembles the preceding species, but is more depressed. Verrill observes that a young specimen, apparently of this species, has a distinct epidermis, bearing small hair-like processes, most prominent on the carinæ.

L. CINCTA, Jeffreys. Pl. 51, figs. 88, 89.

Thin, opaque, glossy, with a few spiral striæ, of which one below the suture is more prominent, and minutely tuberculated on the upper whorls, white; whorls 5, convex, with deep suture; outer lip thin, slightly expanding, folded over the pillar, inner lip attached to the pillar; umbilicus shallow, enclosed by a semicircular ridge and ending in a small, deep perforation. Length, 2·5 mill.

Atlantic Ocean (Porcupine Exped.)

L. NATICIFORMIS, Jeffreys. Pl. 51, figs. 90, 91.

Obtusely triangular, with excentric spire, thin, semitransparent and glossy, with a few rather strong basal striæ, besides the umbilical ridge, white; whorls 3, convex, rapidly increasing; umbilicus rather large, with a small, deep perforation.

Length, 1·75, diam. 2·75 mill.

Atlantic Ocean (Porcupine Exped.)

L. OLIVACEA, Verrill. Pl. 51, fig. 92.

Thin, translucent, with 4 convex whorls, the suture scarcely impressed, smooth, glossy, covered by a greenish yellow, thin, closely adherent epidermis; imperforate. Length, 4 mill.

Off Martha's Vineyard, Mass.

Probably not a member of the group, differing in having no excavated umbilicus, and in possessing an epidermis?.

Unfigured Species of Cithna.

L. PICTA, Watson. *Lat.* 9°, 5′, *S.*; *long.* 34°, 40′, *W.*
L. INFLATA, and L. GLABELLA, Monts. *Mediterranean.*
L. SPIRATA, and L. GLOBOSA, Adams. *Japan.*

Doubtful and Unfigured Species of Lacuna.

L. DECORATA, L. LATIFASCIATA, L. LEPIDULA, L. TURRITA, and L. INFLATA, A. Ad. *Japan.*
L. CARINIFERA, A. Ad. *Borneo.*
L. UNICARINATA, E. A. Smith. *Japan.*
L. (EGILIA) MEDITERRANEA, Monts. *Mediterranean.*
L. SUCCINEA, Mörch. *West Coast of Central America.*
L. VESTITA, Dunker and Metzgar. *North Sea.*

L. PARVULA, Velain. Pl. 51, fig. 78.

Whorls angulated by spiral carinæ, of which there are three on the body whorl, fading towards the aperture; umbilicus narrowly rimate. Length, 1 mill.

Isl. St. Paul, Indian Ocean.

L. HEBERTI, Velain. Pl. 51, fig. 79.

Smooth, with three convex, rapidly increasing whorls, yellowish or brownish grey, umbilicus scarcely rimate. Length, 1·75 mill.

Isl. St. Paul, Indian Ocean.

This and the preceding species are of doubtful pertinence to the present group.

Family *FOSSARIDÆ*.

Genus FOSSARUS, Phil., 1841.

F. AMBIGUUS, Linn. Pl. 52, figs. 3–5.

Spirally striated, three of the striæ usually more prominent so as to cause the body whorl to appear angulated or carinated, epidermis light yellowish brown, aperture white. Length, 5 mill.

Mediterranean, Senegal.

The synonyms include *F. Adansoni*, Phil., *F. Lanoei*, Baudon, *F. lucullana*, Scacchi., *F. Sicula*, Aradas, *F. costatus*, Scacchi, *F. Kutschigi*, Brusina.

F. ELEGANS, Verrill & Smith. Pl. 51, fig. 96.

Spirally carinated, the last whorl with a carina at the shoulder, often with a smaller one just below it, a larger one again at the periphery, and three or four smaller ones below, besides a spiral fold round the umbilical region; there are also sometimes two or three strong raised varices, whorls latticed between the carinæ, white, umbilicus narrow, sometimes closed. Length, 5·3 mill.

Off Martha's Vineyard, Mass.; 100 fms.

This may prove to be a variety of *F. ambiguus*.

F. ORBIGNYI, Fischer. Pl. 52, fig. 6.

Umbilicated, white, rugose, with several distant spiral riblets, the interstices longitudinally striate; whorls 4, convex, with excavated suture. Length, 8, diam. 9 mill.

Cuba. Sta. Lucia, Jamaica.

Described by d'Orbigny as *F. sulcatus*, and changed as above on account of *F. sulcatus*, Wood.

F. MEDIOCRIS, Folin. Pl. 51, fig. 97.

Minute, imperforate, spirally ribbed, the sulci between the ribs longitudinally crenately striate; whorls 4, convex, with simple suture, chestnut colored. Length, 2·6 mill.

Bay of Panama.

F. LAMELLOSUS, Montrouz. Pl. 52, fig. 7.

Imperforate, solid, with acute spire and dilated base, with sharp, distant spiral ribs, of which there are four on the body whorl, the two upper ones strongest, interstices longitudinally lamellarly striate. Length, 6–8 mill.

New Caledonia.

F. PUSILLUS, Gould. Pl. 52, fig. 8.

Umbilicated, whitish, with minute spiral lines and three distant spiral ribs on the body whorl. Length, 4 mill.

Fishtown, Liberia.

Described as a Trichotropis.

F. ATRATUS, C. B. Ad. Pl. 52, fig. 10.

Minutely umbilicated, blackish, sometimes with a few white spots on the last whorl, and several revolving keels; the species variable in form and number of keels, conic when young, subglobular when mature. Length, 2 mill.

Panama.

Section PHASIANEMA, S. Wood. 1842.

F. RETICULATUS, S. Wood. Pl. 51, fig. 98.

Rather solid, semitransparent, lustreless, with numerous, sharp, distant longitudinal riblets crossed by more numerous, close spiral striæ, subimperforate; whorls 4, rather convex, the last inflated, light yellowish brown. Length, 1·5 mill.

Atlantic Ocean (Porcupine Exped.)

F. interjunctus, Jeffreys, Ms., is a synonym.

F. SULCATUS, S. Wood. Pl. 51, figs. 94, 95, 99, 100.

Spire elevated, whorls a little shouldered, the last large, with about six spiral riblets, the interstices clathrate, yellowish white; lip denticulated; umbilicus rather widely rimate. Length, 6 mill.

Mediterranean Sea.

It is *F. clathratus*, Phil., *F. costatus*, Brocchi., *F. minutus*, Mich. Two unfigured species from the Asiatic Seas, *F. tornatilis*, Gould, from Hong Kong, and *F. Japonicus*, A. Ad., from Japan, were considered by the latter author synonymous with *F. costatus*. To this Eastern synonymy must be added *F. Stoliczkanus*, Nevill (fig. 95.)

Unfigured and Doubtful Species.

F. GARRETTI, Pease (*Adeorbis costata*, Garrett). *Sandwich Is.*

F. GRANULUM, Brugnone. *Mediterranean Sea.*

Section ISAPIS, H. & A. Adams, 1854.

F. FENESTRATA, Carp. Pl. 52, fig. 11.

Umbilicated, spirally lirate, the liræ acute, distant, about 9 on the body whorl, the wider interstices with closer longitudinal sculpture; light yellowish brown, epidermis shaggy. Length, 5–6 mill.

Vancouver's Isl. to Lower California.

F. OBTUSA, Carp. Fig. 12.

Narrower, whorls less convex, less sharply costate than *F. fenestrata*; whorls flattened behind, ribs swollen, uneven.

Southern California.

I suspect that this will prove to be a mere variety of the preceding species.

Unfigured Species of Isapis.

F. ANOMALUS, C. B. Ad. *Jamaica.*
F. LIRATUS, and F. CONOIDEUS, A. Ad. *Japan.*
F. MACULOSUS, Carp. *Mazatlan.*
F. OVOIDEUS, Gould. *Mazatlan.*

Section COUTHOUYIA, A. Adams. 1860.

F. INSIGNIS, Nevill. Pl. 51, fig. 1; Pl. 52, fig. 13.

Widely umbilicated, whorls convex, the last subevolute, suture deeply channeled, surface spirally cingulated, elegantly reticulated by longitudinal lines. Length, 7 mill.

Singapore, Ceylon, Japan.

F. reticulatus, A. Ad. (fig. 13), is a synonym; it was first described, but the name is preoccupied by S. Wood.

Var. DELICATULA, Nevill.

Smaller, thinner, umbilicus smaller, spiral ribs one or two fewer.

Bombay.

Var. PERSOLUTA, Nevill.

Last whorl considerably less ventricose and more solute than in the typo.

Japan.

Unfigured Species of Couthouyia.

F. SUBRETICULATUS, Nevill. *India.*
F. SOLUTUS, and F. APPRESSUS, Nevill. *Persian Gulf.*
F. STYLIFERINUS, Nevill. *Singapore, Bombay.*
F. PLICIFERUS, F. STRIATULUS, and F. DECUSSATUS, A. Ad. *Japan.*

Section CONRADIA, A. Ad., 1860.

Unfigured Species.

F. DOLIARIS, A. Ad., and var. MINOR, Nevill.

Japan, Hong Kong, Bombay.

F. PULCHELLUS, F. TORNATUS, F. CINGULIFERUS, A. Ad. *Japan.*

F. ADAMSIANUS, Nevill. *Persian Gulf.*
F. CLATHRATUS, A. Ad. (*F. Adamsianus*, Fischer.) *Japan.*

Section GOTTOINA, A. Ad., 1863.

F. CIRREUS, Watson. Pl. 51, fig. 2.

Rather solid, translucent, with a thin, polished, yellowish epidermis, imperforate; nearly smooth, with rather obsolete spiral threads, closer on the base; whorls 3, convex, rapidly increasing; columella a little truncate at the base, where the aperture is slightly produced.

Length, 5 mill.

N. E. Australia; 1400 fms.

F. SULCIFERUS, F. PYRGULA, A. Ad. (unfigured.) *Japan.*

Unfigured Species of Fossarus.

The following species, said to belong to the genus, have not been placed in either of its groups:

F. EXCAVATUS, F. ANGIOSTOMA, F. MEGASOMA, F. FOVEATUS, F. ABJECTUS, C. B. Ad. *Panama.*
F. ANGULATUS, F. TUBEROSUS, Carpenter. *Mazatlan.*
F. PARCIPICTUS, F. PURUS, Carpenter. *Cape St. Lucas, L. California.*
F. TASMANICUS, F. BULIMOIDES, Tenison Woods. *Tasmania.*
F. FENESTRATUS, A. Ad. *Japan.*
F. CUMINGII, A. Ad. *Hab. unknown.*
F. TROCHLEARIS, A. Ad. *Philippines.*
F. BICARINATUS, A. Ad. = *Separatista.*
F. MIRABILIS, Nevill. *Arakan.*
F. IMPERFORATUS, Nevill. *Penang.*
F. MULTICOSTATUS, Pease. *Sandwich Is.*

Subgenus RAULINIA, Mayer, 1864.

F. BADIA, Tenison Woods (unfigured.) *Tasmania.*

Subgenus IPHITUS, Jeffreys, 1883.

F. TUBERATUS, Jeffreys. Pl. 52, fig. 14.

Imperforate, solid, opaque, dull white, with a faint tinge of yellow, spirally ridged, the ridges tuberculate, base spirally striate, styliform process broken off; whorls 3, rapidly increasing, the last with

obtusely angulated periphery; outer lip undulated by the spiral sculpture. Length, 2 mill.

Atlantic Ocean (Porcupine Exped.)

F. TUBERCULATUS, Watson. Pl. 52, fig. 15.

Solid, glossy white; whorls 7½–8, flattened, slowly increasing, with spiral, stoutly tuberculated ribs, of which there are four on the body whorl, periphery angulated, lip varicose, continuous, interior margin double. Length, 1·75 mill.

Off Culebra Isl., West Indies; 390 fms.

The styliform apex consists of 3 whorls, the first two smooth, the last with a half dozen spiral threads.

Genus FOSSARINA, Ad. and Angas. 1863.

F. PETTERDI, Brazier. Pl. 52, figs. 20, 21.

Narrowly umbilicated, faintly spirally striate, with hardly visible longitudinal striæ, dark purplish black, with a few irregular white markings; whorls 3, convex, the last large and rounded, umbilical region white; interior greenish black, showing the external white markings. Operculum thin, many-whorled. Diam. 4·25 mill.

Hobart Town, Tasmania.

Hutton remarks that this species has the dentition and operculum of the Trochidæ but not of the Littorinidæ, and that it may possibly be an Adeorbis. *Proc. Linn. Soc., N. S. W.*, vii, 66.

It has not the pearly nacre of Trochus.

F. Simpsoni, Tenison Woods, is a synonym.

F. PICTA, A. Ad. Pl. 52, fig. 16.

Widely umbilicated, spirally lirate, yellowish, irregularly maculated with chestnut; whorls 4, convex, periphery rounded.

Diam. 3 mill.

Japan.

F. BRAZIERI, Angas. Pl. 52, fig. 17.

Narrowly umbilicated, rather solid, ash grey, maculated with purplish brown, irregularly spirally ridged, two of the ridges more prominent, like carinæ, longitudinally striated; whorls 3½, with well-impressed suture. Diam. 3·5 mill.

Port Jackson, Australia.

F. FUNICULATA, Tenison Woods. Pl. 52, figs. 18, 19.

Subumbilicated, solid, opaque, almost ear-shaped, with rounded alternately larger and smaller spiral ribs, more minute on the base;

whitish, with dark zigzag lines and spots; whorls 3½, the last much expanded. Diam. 5 mill.

Victoria, Australia.

F. PATULA, Adams & Angas. Pl. 51, fig. 2, a.

Widely umbilicated, with alternate larger and smaller tuberculated spiral ribs, ribs simple on the base, umbilicus acutely carinate-margined; whitish, sparsely maculated with dark brown; whorls 3, convex; outer lip ascending posteriorly. Length, 6 mill.

Port Jackson, Australia.

Appears to have the ornamentation, but not the form of the preceding species.

Unfigured Species.

F. VARIA (*Adeorbis*), Hutton. *New Zealand.*
F. LEGRANDI, Petterd. *Tasmania.*
F. VARIEGATA, A. Ad. *Eastern Seas.*

FAMILY *PLANAXIDÆ.*

Subfamily PLANAXINÆ.

Genus PLANAXIS, Lam., 1822.

P. SULCATUS, Born. Pl. 52, figs. 22–27, 31, 32.

Thick, spirally ribbed, with equal grooves, tessellated with white and chocolate color, sometimes becoming irregular longitudinal strigations, interior chocolate, ridges and columella white.

Length, 1 in.

Sandwich Is., Australia, Philippines, Mauritius, South Africa.

It is *P. buccinoides*, Desh., *P. Menkeanus*, Dunker, *P. pyramidalis*, Gmel., *P. undulatus*, Lam., and probably *P. obscurus*, A. Ad. (fig. 31.)

I think that *P. brevis*, Quoy. (fig. 32), is the young of this species; it is sparsely dotted with white.

Var. BREVICULUS, Desh. Fig. 24.

Shell shorter, more ventricose, grooves and ribs less strong.

Persian Gulf, Moluccas, New Guinea.

Nevill has described a var. *tessellata*.

Var. SAVIGNYI, Desh. Figs. 25–27.

Flat-ribbed, with narrower grooves, sometimes nearly obsolete, greyish brown, tessellated and undulated with chestnut, often with a lighter band at the periphery and another at the suture.

Red Sea, Persian Gulf.

P. grisea, Brocchi., *P. encaustica*, E. A. Smith (fig. 27), and var. *subnigra*, Nevill, are synonyms.

P. CRASSISPIRA, E. A. Smith. Pl. 52, fig. 28.

Distantly spirally grooved, grey, spotted and shortly strigate with chocolate. Length, 20 mill.

Hab. unknown.

Probably a very narrow form of *P. sulcatus*.

P. PLANICOSTATUS, Sowb. Pl. 52, fig. 30.

Dark chocolate color, with subequal alternate spiral ribs and grooves, lighter colored within. Length, 1 in.

San Blas, Panama, Galapagos Is.

It is *Bucc. planaxis*, Wood, *P. canaliculatus*, Duval, *P. circinata*, Lesson.

P. SUTURALIS, Smith. Pl. 52, fig. 33.

Yellowish white, spirally deeply grooved, with intermediate flat ribs. Length, 6 mill.

Chinese Seas.

P. NUCLEUS, Lam. Pl. 52, fig. 36.

Chocolate color, epidermis shortly velvety, flat ribbed and spirally grooved, but the sculpture obsolete except close to the aperture at the suture and on the base, the outer lip being fimbriated by it, interior chocolate. Length, 15–18 mill.

West Indies.

P. semisulcatus, Sowb., is a synonym.

P. ABBREVIATUS, Pease. Pl. 52, fig. 40.

Shorter than the next species, and without the expanded lip of *P. nucleus*, blackish chocolate, with closely-engraved striæ, obsolete except at the base. Length, 7·5 mill.

Tahiti.

P. NIGRA, Quoy. Pl. 52, figs. 37, 39, 41–47.

Epidermis chocolate or olivaceous chocolate, smooth, a few close, narrow, engraved lines at the base, and occasionally vestiges of others on the spire and at the suture, interior polished chocolate.

Length, 13–15 mill.

New Ireland, Viti and Sandwich Is., South Africa.

P. Hanleyi, Smith (fig. 39), *P. similis*, Smith (fig. 44), and *P. acutus*, Krauss (fig. 42), are synonyms. *P. Albersi*, Dunker (fig. 46), from Guinea, West Africa, may be identical, or it may be the young of *P. nucleus;* and probably *P. atropurpureus*, Recluz (fig. 45), from the "South Seas," may be added.

Var. NIGRITELLA, Forbes. Pl. 52, figs. 47, 43.

Dark chestnut or chocolate color, polished, under a thin epidermis, closely, narrowly spirally engraved, usually obsolete on the middle of the body whorl. Length, 12–15 mill.

It is somewhat difficult to distinguish this variety from the type, except by its distribution; it is usually lighter colored and occurs at Mazatlan, West Coast of Mexico.

P. acutus and *P. obsoletus*, Menke, are synonyms, and very probably *P. castaneus*, Smith (fig. 43), is to be added; it is described without locality.

P. LINEATUS, Da Costa. Pl. 53, figs. 49–57, 59, 63–66; Pl. 52, figs. 38–48.

Small, nearly smooth, polished beneath the epidermis, light yellowish varying to orange brown and chestnut color, spirally lineated with chestnut and chocolate. Length, 6–12 mill.

West Indies, Madeira, Paumotus, Tahiti, Solomon's Is., etc.

The lineations are usually regular throughout, but sometimes few and distant, at others the upper or lower part of the body whorl is devoid of them. First described in error as British.

The synonyms are *Bucc. zebra*, Megerle, *B. strigosum*, Gmel., *P. pedicularis*, Lam., *Bucc. pygmæum*, Brug., *P. succinctus*, A. Ad. (fig. 65), *P. eboreus*, Smith (fig. 64.) There can be no doubt of the specific identity of the Polynesian representatives which have received the names of *P. lineolatus*, Gould (fig. 57), and its var. *productus*, Nevill, *P. fasciatus*, Pease (fig. 66), *P. atra*, Pease (fig. 38), named from specimens so dark in color that the banding is scarcely visible except by transmitted light, *P. cingulatus*, A. Ad. (fig. 48), *P. variabilis*, E. A. Smith (figs. 50, 51), *P. ineptus*, Gould (fig. 52),

and its variety *persulcata*, Nevill, *P. virgatus*, Smith (fig. 49), *P. zonatus*, A. Ad. (fig. 53), *P. longispira*, Smith (fig. 55), *P. strigatus*, Hanley (fig. 59), and *P. Hermannseni*, Dunker (fig. 54.)

Var. LABIOSUS, A. Adams. Fig. 41–56.

Shell larger and stouter, frequently covered by a persistent shortly pilose epidermis, upon which the darker bands of the shell are somewhat elevated.

Polynesia.

P. striatula, Phil. (fig. 56), *P. vestitus*, Dkr., *P. plumbeus*, Pease *P. pediculus*, Krauss, *P. Bronni*, Dunker are synonyms.

This catalogue of synonyms may appear to some to be a ruthless slaughter of species. I can only say that the admirable collection before me fully justifies me.

P. PUNCTOSTRIATUS, E. A. Smith. Pl. 53, figs. 60, 61.

Whorls convex, with very minute punctured spiral striæ, pale fulvous, ornamented with spiral rows of small square chestnut spots; margin of outer lip spotted. Length, 6·5 mill.

Hab. unknown.

P. TENUIS, E. A. Smith. Pl. 53, fig. 58.

Thin, elongated, polished, semipellucid, white, with a few distant, spiral, red lines, lightly spirally grooved, body whorl strongly grooved and ventricose below; outer lip thin. Length, 5·5 mill.

Hab unknown.

Very probably a variation of *P. lineata*, DaCosta.

Section HINEA, Gray, 1847.

P. MOLLIS, Sowb. Pl. 52, figs. 34, 35, 29.

Whitish under a yellowish brown, minutely pilose epidermis, sometimes with a darker peripheral band, smooth, with several engraved lines near the base, aperture yellowish white.

Length, 20–25 mill.

Easter Island, Australia, Nicobar Is.

First described by Lamarck under the name of *P. Brasiliensis*, a misnomer. Other synonyms are *P. pigra*, Forbes, *Bucc. lævigatum*, Wood, *P. fulva*, A. Ad. I think that *P. Nicobaricus*, Zelebor (fig. 29), will prove to be at most a slight variety.

Subgenus QUADRASIA, Crosse, 1886.

P. HIDALGOI, Crosse. Pl. 53, figs. 67, 68.

Imperforate, solid, dull, orange brown, minutely spirally striulate, suture margined, outer lip simple, not dentate within.

Length, 13 mill.

(Fluviatile) *Philippines.*

This appears to be an undoubted inhabitant of fresh water, and as such is an interesting novelty; but are not its affinities with Melanopsis rather than with Planaxis?

Subgenus QUOYIA, Desh., 1830.

P. DECOLLATUS, Quoy. Pl. 53, figs. 71, 70.

Strongly spirally grooved, grooves stronger on the base; columellar lip excised above; epidermis olivaceous, with dull chestnut obliquely longitudinal strigations; apex decollated.

Length, 28 mill.

Philippines, Ascension Isl., New Guinea.

It is *Monoptygma melanoides*, Lea, and *P. Michaui*, Crosse and Fischer (fig. 70.) The latter is founded on a younger specimen, in which a chestnut peripheral band appears, and the interior of the outer lip is not ridged; both these characters merge into the normal type of the species with increasing age.

Subgenus HOLCOSTOMA, H. & A. Ad., 1853.

P. PILIGERUS, Phil. Pl. 53, figs. 62, 69.

Smooth, under a bristly epidermis, yellowish brown, with two chestnut bands, outer lip dentate within. Length, 8 mill.

Mauritius.

The first figure is from an adult denuded of epidermal hairs, the second represents *H. setigerum*, A. Ad. (fig. 69), which is said by Mr. E. A. Smith, of the British Museum, to be identical; if so, it must be a much-magnified figure of a young shell which has not yet acquired the teeth to the outer lip.

Unfigured Species of Planaxis.

P. INCISUS and P. TÆNIATUS, Phil.	*Hab. unknown.*
P. NUCLEOLA, Mörch.	*West Indies.*
P. BUCCINEA, A. Ad.	*West Indies.*
P. GOULDI, Smith (*P. cingulatus*, Gld., not Ads.)	*Japan.*
P. AREOLATUS, Lesson.	*Tahiti.*
P. SEMILÆVIS, Martens.	*Socotra.*
P. EBENINUS, Menke.	*Peru.*

Subfamily LITIOPINÆ.

Genus LITIOPA, Rang., 1829.

L. MELANOSTOMA, Rang. Pl. 53, figs. 72–75, 78.

Whorls about 9, slightly convex, towards the apex microscopically longitudinally costulate, other whorls very finely spirally stri-

ate; light yellowish brown, outer lip often bordered internally with black. Length, 6 mill.

Pelagic, universally distributed in warm seas, on floating seaweed.

The synonymy includes *L. striata*, Pfr., *Buccinum litiopa*, Mrs. Gray, *L. bombyx*, Rang. (fig. 74), *L. maculata*, d'Orb., *L. divisa*, Carp., *L. nitidula*, Pfr. (fig. 73), *L. decussata*, Gould (fig. 78), and *L. Grateloupiana*, Drouet. (fig. 75.)

L. Savignyi, Issel. Pl. 53, fig. 76.

Smooth, translucent, whitish or yellowish, with numerous small opaque white spots; whorls 7, suture impressly margined; columella subtruncate. Length, 3 mill.

Suez.

The figure has the aperture of a Diala, but Issel describes the columella as above.

L. Jeffreysiana, Issel. Pl. 53, fig. 77.

Whitish, subpellucid, shining, smooth; whorls 9–10, the last subangulate above and below; columella straight, subtruncate at the base. Length, 2 mill.

Red Sea.

Possibly synonymous with *L. melanostoma.*

L. Belangeri, Eyd. et Soul. Pl. 53, fig. 79.

Longitudinally costate towards the apex, very finely spirally striate elsewhere, reddish brown, with darker spiral bands; columella not truncate below. Length, 6 mill.

China Sea.

Unfigured Species.

L. ventrosa, A. Ad., and var. minor, Nevill. *Indian Ocean.*
L. effusa, and L. obesa, C. B. Ad. *Jamaica.*
L. ventrosa and L. carinata, Pfr. *Cuba.*

Subgenus Alaba, A. Ad., 1862.

All the species of the typical group (most of them by Arthur Adams), remain unfigured, and I have no reliably determined specimens from which to represent the types.

Unfigured and Undetermined Species.

L. tervaricosa, L. melanura, C. B. Ad. *Jamaica.*

Cingula præusta, Recluz is said to be a synonym of the last-named species.

L. SUPRALIRATA, L. VIOLACEA, L. TEREBRALIS, L. ALABASTRITES, L. CONICA, L. SCALATA, L. MUTANS, Carp. *Mazatlan.*

L. PICTA, L. LEUCOSTICTA, L. CORNEA, L. ZEBRINA, L. IMBRICATA, L. FELINA, L. LUCIDA, L. INFLATA, and L. SUBANGULATA, A. Ad. *Japan.*

L. VIBEX, L. PULCHRA, L. PAGODULA, A. Ad. *Australia.*

L. BLANFORDI, A. Ad. *Siam.*

L. PUNCTOSTRIATA, Gould. *Loo Choo Is.*

L. SENEGALENSIS, Maltzan. *Senegal.*

L. RECTANGULA, Craven. *Ceylon.*

L. WOOD-MASONIANA, Nevill. *Andaman Is.*

L. DORIÆ, Issel. *Suez.*

L. ST. CLARÆ, Tenison Woods. *Tasmania.*

Subgenus DIALA, A. Ad., 1862.

L. SEMISTRIATA, Phil. Pl. 53, fig. 81.

Thin, reddish brown, variegated with a lighter shade; whorls 7, flattened, the last with subangulated periphery, spirally ribbed and sulcate below it. Length, 4·5 mill.

Mauritius, Japan, Hong Kong, Bombay, Suez, etc.

It is *L. macula* (Reeluz), Nevill, and *L. varia*, A. Ad.

L. INCERTA, d'Orbigny. Pl. 70, fig. 64a.

This species, which I placed among the unfigured Eulimidæ in vol. viii, 278, was figured in the Moll. Cuba. I now add illustration and description.

Shell smooth, polished, whitish, with spiral white maculations; whorls 8, the last a little angulated, striated below.

Length, 3 mill.

Cuba.

L. MARTENSI, Issel. Pl. 53, fig. 82.

Shining, closely spirally striated; whorls 7½, subplanulate, with deep suture, last whorl with obtusely angulated periphery, and spirally sulcate below it. Length, 2·25 mill.

Red Sea (subfossil.)

L. LAUTA, A. Ad. Pl. 53, fig. 83.

Whitish, with spiral interrupted brown lines; whorls 7, flattened, spirally sulcate, periphery subangulate, sulci stronger on the base. Length, 6–7 mill.

Port Adelaide, South Australia.

L. punctata, Tenison Woods, is a synonym.

L. PHASIANELLA, Angas. Pl. 53, fig. 84.

Thin, semipellucid, smooth, whitish, encircled by several thread-like, more or less interrupted chestnut lines, with a band of alternate white and chestnut spots above the suture, and a few short longitudinal flames beneath them. Length, 6 mill.

Port Jackson, Australia.

The original description gives the whorls as nearly flat, but in the figure they are moderately rounded.

L. ALBUGO, Watson. Pl. 53, fig. 88.

Spirally striated, fulvous, spotted with white in spiral lines, and irregular broad longitudinal strigations, and forming irregular white bands at the top of the whorls and angulated periphery; whorls 6, flattened. Length, 3·3 mill.

Wednesday Isl., N. E. Australia.

L. SUTURALIS, A. Ad. Pl. 53, fig. 85.

Subumbilicated, white, shining, subdiaphanous; whorls 7, flattened, with channeled suture, spirally sulcate, last whorl subsolute, with subangulated periphery, and narrow bands articulated with white; columellar lip obsoletely plicate. Length, 9 mill.

Philippines.

L. LEITHI, E. A. Smith. Pl. 53, fig. 86.

Imperforate, thin, yellowish, with narrow chestnut bands, two in the last whorl; whorls 9, convex, spirally striate, the last whorl obtusely angulated. Length, 7·5 mill.

California.

In error the figure accompanying the original description is labelled *Carinifex Ponsonbyi.*

L. MARMOREA, Carp. Pl. 53, fig. 87.

Solid, glossy, whitish, with faint chestnut longitudinal strigations; whorls flattened, periphery faintly angulated. Length, 5 mill.

Monterey, Cal.

L. LIMNÆIFORMIS, Watson. Pl. 53, fig. 89.

Scarcely rimate, thin, smooth, whitish horny; whorls 3½, rapidly increasing, suture deep; columella subtruncate. Length, 2·25 mill.

Prince Edward's Isl.

Unfigured and Undetermined Species of Diala.

L. MONILE, A. Ad. (*L. tessellata*, Tenison Woods, a syn.)

Australia.

L. TUMIDA, Tenison Woods. *Tasmania.*

L. ACUTA, and L. ELECTRINA, Carp. *California, Lower California.*
L. PAUPERCULA, C. B. Ad. (*L. mammillata*, Carp.)
Panama, Mazatlan.
L. SUCCINCTA, A. Ad. *Suez.*
L. SULCIFERA, A. Ad. *Japan.*
L. RUFILABRIS, A. Ad. (Is a Hydrobia.) *Australia.*
L. TENUIS and L. SIMPLEX, E. A. Smith. *Japan.*

Subgenus STYLIFERINA, A. Ad., 1860.

See Monograph of Eulimidæ, Manual, viii, 286.

The following additional species are published in the Report of the Challenger Expedition, in which work the group is referred to Litiopidæ.

L. STRIATA, Watson. Pl. 53, fig. 80.

Spirally striated and longitudinally ribbed, the intersections nodulous, style short, cylindrical, whorls convex, suture impressed; whorls 5, besides 3 smooth whorls of the style; columella a little truncate below. Length, 2·5 mill.

Tahiti.

L. FULVA, Watson. Pl. 53, fig. 90.

Fulvous, narrowly, distantly longitudinally ribbed, more closely spirally striate; apical whorls 2, smooth, the others 10, convex, periphery slightly angulate; columella obliquely, slightly truncate. Length, 3·3 mill.

Cape York, N. E. Australia.

L. SULCATA, Watson. Pl. 53, fig. 91.

White, spirally striated, the striæ obsolete on the middle of the body whorl; apex scarcely styliform, normal whorls 5, convex. Length, 1·75 mill.

Cape York, N. E. Australia.

The appearance of a canal in the figure is caused by a portion of the base of the aperture being broken off. Watson remarks that it may be the young shell of some other genus.

L. GONIOCHEILA, A. Ad. Pl. 53, fig. 92.

Thin, vitreous, pellucid, with a single spiral series of milk-white maculations on the middle; whorls 9, somewhat convex, suture margined. Length, 5 mill.

Japan.

This was included among the unfigured species of Eulimidæ, in Manual, viii, 286. I am now able to add a figure from the Challenger Report.

L. LEPIDA, A. Ad. (unfigured.) *Japan.*

Family *GIRAUDIDÆ.*

Genus GIRAUDIA, Bourg., 1885.

G. PRÆCLARA, G. GRANDIDIERIANA, Bourg. (unfigured.)
Lake Tanganyika.

Genus REYMONDIA, Bourg., 1885.

R. HOREI, Smith. Pl. 70, fig. 64b.

Smooth, chestnut colored, with a white line beneath the suture; whorls 6½, scarcely convex, suture simple, last whorl rising somewhat upon the preceding near the aperture, then suddenly descending, furnished with a slight basal thickening; lip a little thickened, especially towards the suture, somewhat patulous near the base.

Length, 14 mill.

Lake Tanganyika.

Described as a doubtful Melanian. From the figure, it appears to me to be not very distantly related to Melanopsis.

R. GIRAUDI, Bourg. (unfigured.) *Lake Tanganyika.*

INDEX AND SYNONYMY.

LITTORINIDÆ.

PAGE.

Abbreviata (Planaxis), Pse. Zool. Proc., 1865, p. 515, . . 277
Aberrans (Littorina), Phil. Zool. Proc., p. 142, 1845, . . 245
Abjectus (Fossarus), C. B. Ad. Cat. Panama, . . . 274
Acuminata (Littorina), Gld. Bost. Proc., iii, p. 83, 1849, . 252
Acuta (Diala), Cpr. Calif. Proc., iii, p. 218, 1868, . . . 284
Acuta (Littorina), Menke. Moll. Nov. Hollan., p. 9, 1843.
= L. Mauritiana, Lam. 247
Acutus (Planaxis), Krauss. Sudafrik Moll., p. 103, t. 6, f. 2, 1848. = P. nigra, Quoy. 278
Acutus (Planaxis), Menke (not Krauss.) Zeitsch. für Malak., p. 169, 1850. = P. nigritellus, Forbes, ... 278
Adamsi (Cithna), Jeffreys. Zool. Proc., p. 111, t. 20, f. 10, 1883, ... 268
Adamsi (Littorina), Rve. Conch. Icon., f. 85, a, b., 1857, . 255
Adamsiana (Conradia), Nevill. Hand List, p. 169, 1885, . 274
Adamsianus (Fossarus), Fisch. Jour. Conch., 259, 1864.
= F. clathratus, A. Ad. 274
Adansoni (Fossarus), Phil. Arch. für Naturg., i, p. 47, 1841.
= F. ambiguus, Linn. 271
Æstuarii (Littorina obtusata, var.), Jeffreys. Brit. Conch., v, p. 205, t. 101, f. 8, ... 253
Affinis (Littorina), d'Orb. Moll. Canaries, p. 79, t. 6, f. 11, 12.
= L. striata, King. 247
Africana (Littorina), Krauss. Sudafrik. Moll., p. 102, . . 248
Africana (Littorina), Rve. (not Phil.). Conch. Icon., f. 37.
= L. Mauritiana, Lam. 247
Ahenea (Littorina), Rve. (in part.) Conch. Icon., f. 13, b, c, 1857. = L. lineata, Gmel. 243
Ahenea (Littorina), Rve. (in part.) Conch. Icon., f. 15a.
= L. scabra, Linn. 243
Alaba, A. Adams. Ann. Mag. N. Hist., x, 293, 1862, . 238, 281
Alabastrites (Alaba), Carp. Mazatlan Shells, p. 368, . . . 282
Albella (Lacuna), Lovén. Index Moll. Scand., p. 23.
= L. divaricata, Fab. 266
Albersi (Planaxis), Dkr. Nov. Conch. Supp., ii, t. 2, f. 35–37, 1853. ? = P. nigra, Quoy. 278
Albescens (Lacuna pallidula, var.), Thorpe. Brit. Mar. Conch., 1844, ... 265
Albicans (Littorina), Metcalfe. Zool. Proc., p. 73, 1851, . 253

PAGE.
Albida (Littorina), Phil. Abbild., iii, p. 57, t. 7, f. 9, 1848. = L. conspersa, Phil. 249
Albugo (Alaba), Watson. Challenger Exped., xv, p. 568, t. 43, f. 3, 1886, ... 283
Aleutica (Littorina), Dall. Calif. Proc., iv, p. 271, 1872, t. 1, f. 3. = L. Sitchana, Phil. var. 241
Ambigua (Fossarus), Linn. Syst. Nat. Ed., xii, p. 1251, . 271
Ambigua (Littorina), Nutt. Mss. in Phil. Abbild., p. 56, t. 7, f. 6. = L. pintado, Wood, 1846, ... 250
Ambigua (Littorina), Rve. (not Nutt.). Conch. Icon., f. 64, 1857. = L. picta, Phil. var. 248
Angiostoma (Fossarus), C. B. Ad. Ann. Lyceum, p. 394, . 274
Angulata (Margarita), A. Ad. Zool. Proc., p. 190, 1851. = Risella tantilla, Gould. 263
Angulata (Monodonta), C. B. Ad. Bost. Proc., 1845. = M. unidens, Lister. 261
Angulatus (Fossarus), Carp. Mazatlan Shells, p. 354, . . 274
Angulifera (Littorina), Lam. Anim. sans Vert., vii, p. 54. = L. scabra, Linn. 243
Angustior (Littorina), Mörch. Mal. Blatt., p. 139, 1876. = L. zieczac, Chemn. 251
Anomalus (Fossarus), C. B. Ad. Contrib., p. 109, . . . 273
Antarctica (Lacuna), Martens. Sitz.-Bericht. Berlin, p. 92, 1885, ... 267
Antipodum (Littorina), Phil. Abbild., t. 4, f. 2, 1847. = L. Mauritiana, Lam. 247
Antoni (Littorina), Phil. Abbild., ii, t. 2, f. 18. = L. dilatata, d'Orb. 258
Apicina (Littorina), Menke. Zeitsch. für Malak., p. 164, 1850, 255
Appressus (Fossarus), Nevill. Hand List, p. 167, 1884, . . 273
Aquilonaria, Dall. Proc. U. S. Nat. Mus., p. 204, 1886, . 230, 255
Araucana (Littorina), d'Orb. Voy. Amer. Mérid., p. 393, t. 53, f. 8–10. = L. Paytensis, Phil. 250
Arboricola (Littorina), Rve. Conch. Icon., f. 27, a, b. = L. scabra, Linn. var. 244
Arctica (Lacuna), Phil. Conch. Cab., p. 41, t. 6, f. 5, 1853. = L. divaricata, Fabr. 266
Arctica (Littorina), Möll. Fauna Grönlandica, p. 9. = L. littoralis, Linn. 242
Ardouinianum (Leptopoma), Heude. Hist. Nat. Empire Chin., iii, t. 25; Crosse, Jour. de Conch., 55, 1885. = Littorina, ... 253
Arenica (Littorina), Nutt. Dkr. Zeitsch. für Malak., p. 166, 1845. = L. striata, King. 247
Areolatus (Planaxis), Lesson. Revue Zoologique, 187, 1842, . 280
Armata (Littorina), Issel. Mar Rosso., p. 192, t. 11, f. 7, . 257
Articulata (Littorina intermedia, var.), Phil. Zool. Proc., p. 141, 1845, ... 244

PYGE.

Articulata (Littorina melanostoma, var.), Nevill. Hand List, p. 151, 1884, ... 245
Articulata (Littorina scabra, var.), Menke (in letter), Phil. Abbild., t. 5, f. 4, 1847, ... 243
Aspera (Littorina), Phil. Zool. Proc., p. 139, 1845, . . 249
Atra (Planaxis), Pse. Amer. Jour. Conch., v, p. 72, t. 8, f. 4, 1869. = P. lineatus, DaCosta. 278
Atratus (Fossarus), Ad. Panama Shells, 271, 1852, . . 272
Atresius, Gabb. Pal. Calif., ii, 268, 1869, ... 237
Atropurpureus (Planaxis), Recluz. Rev. Zool. Cuv., p. 261, 1843, ... 278
Aurantiaca (Lacuna unifasciata, var.), Carp. Zool. Proc., 1856, p. 205; 2d Report, 656, ... 267
Aurata (Risella), Quoy. Voy. Astr., iii, p. 276, t. 62, f. 15, 16. = R. melanostoma, Gmel. 262
Aurea (Littorina), Bonnet. Guerin's Rev. & Mag., xvi, p. 281, t. 22, f. 4, 1864. ? = L. lineata, Gmel. . . . 243
Auricularis (Lacuna), Mtg. Test. Brit., 308, 1806. = L. puteolus, Turton. 265
Australis (Littorina), Gray. Beechey's Voy., p. 141, 1839. = Risella nana, Lam. 262
Azonus (Megalomphalus), Brus. Conch. Dalm., p. 29, 1865, . 268

Badia (Raulinia), Tenison-Woods. Linn. Soc. N. S. W., ii, p. 264, 1878, ... 274
Balteata (Littorina), Rve. Conch. Icon., f. 71, a, b, 1857. = L. brevicula, Phil. var. 241
Basterotii (Littorina), Payr. Moll. Corse, p. 115, t. 5, f. 19, 20, 1826. = L. neritoides, Linn. 252
Beanii (Littorina), Macgilliv. Aberdeen. S., 179. = L. obtusata, Linn. var. 253
Beccarii (Littorina), Tapp. Canefri. Ann. Mus. Civ. Genoa, vii, p. 1031, 1875, ... 255
Bellangeri (Litiopa), Eyd. & Soul. Voy. Bonite, p. 586, 1852, 281
Bembicium, Phil. Zeitsch. für Malak., 1846. = Risella, Gray. 232
Bicarinata (Littorina), Gray, Wood. Supp., t. 6, f. 47. = L. varia, Sowb. 246
Bicarinatus (Fossarus), A. Ad. Zool. Proc., p. 187, t. 20, f. 11, 12, 1853. = Separatista. 274
Bicolor (Littorina), Lam. Anim. sans Vert., vii, p. 31. = L. pagoda, Linn. 256
Bifasciata (Phasianella), Brown. Illust. Brit. Shells, t. 46, f. 44, 45. = Lacuna quadrifasciata, Mont. 266
Blanfordi (Alaba), A. Ad. Ann. & Mag., x, p. 296, 1862, . 282
Blanfordi (Littorina), Dkr. Mal. Blätt., xviii, p. 150, 1871, . 255
Bombix (Litiopa), Gray. Syst. Arrang., p. 70. = L. melanostoma, Rang. 280

PAGE.
Bombix (Litiopa), Rang. Ann. Sci. Nat., p. 303, 1829, . . 281
Bombyxinus, Belanger. Lesson, Illust. de Zool. Append., 1834.
= Litiopa, Rang. 238
Borealis (Lacuna), Phil. Conch. Cab., p. 39, t. 6, f. 2, 1853.
= L. divaricata, Fabr. 266
Bourguignati (Lacuna), Rochbr. Bull. Soc. Philom., 30, 1881, 266
Brachytrema, Morris & Lycett. 231
Brazieri (Fossarina), Angas. Zool. Proc., p. 18, t. 1, f. 24,
1871, ... 275
Brazilianum (Buccinum), Lam. Anim. sans Vert., vii, 272,
1822. = Planaxis mollis, Sowb. 279
Brevicula (Littorina), Phil. Zeitsch. für Malac., p. 166, 1844.
= L. Sitchana, Phil. var. 241
Breviculus (Planaxis), Desh. Mag. Zool., t. 108, 1844.
= P. sulcatus, Born. 277
Brevis (Planaxis), Quoy. Voy. Astr., ii, p. 488, t. 33, f. 30–
32, 1832. ? = P. sulcatus, Born. Juv. 276
Brouni (Planaxis), Dkr. Mal. Blatt., viii, p. 41, 1862.
= P. labiosus, A. Ad. 279
Bruni (Rissella), Crosse. Journ. de Conch., p. 239, t. 11, f. 3,
1864. = R. melanostoma, Gmel. 262
Buccinoides (Planaxis), Desh. Anim. sans Vert. Ed., 2, ix, p.
237. = P. sulcatus, Born. 276
Buccinea (Planaxis), A. Ad. Zool. Proc., p. 272, 1851, . . 280
Bulimoides (Fossarus), Tenison Woods. Roy. Soc. Tasmania,
p. 148, 1876, ... 274
Bullata (Littorina), Martyn. Univ. Conch., p. 38, . . . 257

Cærulescens (Turbo), Lam. Anim. sans Vert. Desh. Edit., ix,
p. 217. = Littorina neritoides, Linn. 252
Caledonicus (Fossarus), Crosse. Journ. de Conch., p. 206,
1874, xxiii, p. 139, t. 6, f. 6, 1875, ... 263
Caliginosa (Littorina), Gld. Bost. Proc., iii, p. 83, 1849, . 254
Canaliculata (Planaxis), Duval. Rev. Zool. Cuv., p. 107,
1840. = P. planicostatus, Sowb. 277
Canaliculatus (Cremnoconchus conicus, var.), Blanford. Journ.
Asiat. Soc. Bengal, xxxix, p. 10, t. 3, f. 4, 1870, . . . 256
Canaliculatus (Modulus), Beck, Mss. Mörch, Mal. Blatt.,
xxiii, p. 131, 1876, ... 262
Canalis (Lacuna), Mont. Test. Brit., p. 309, t. 12, f. 11.
= L. divaricata, Fabr. 266
Canariensis (Littorina), d'Orb. Moll. Canaries, p. 78, t. 6, f.
8–10. = L. striata, King. 247
Candidus (Modulus), Petit. Journ. de Conch., p. 132, t. 6, f.
11, 1853. = M. tectum, Chemn. 260
Carchedonicus (Monodonta), Lam. Anim. sans Vert., vii, p.
33, 1822. = Modulus unidens, Lister. 261

PAGE.

Carinata (Cithna), Jeffreys. Zool. Proc., p. 111, t. 20, f. 9, 1883, ... 269
Carinata (Lacuna), Gould. Bost. Proc., iii, p. 75, 1848. = L. divaricata, Fabr. 266
Carinata (Litiopa), Pfr. Archiv. für Naturg., i, p. 255, 1840, 281
Carinata (Littorina), d'Orb. Moll. Cuba, p. 209, t. 15, f. 1–4, 1853. = L. ziczac, Chemn. 251
Carinatus (Anculotus), Layard. Zool. Proc., p. 94, 1854. Journ. Asiat. Soc. Beng., xxxix, t. 3, f. 5, ... 256
Carinifera (Lacuna), A. Ad. Zool. Proc., p. 225, 1851, . . 270
Carinifera (Littorina), Menke. Synopsis, 2d Edit., p. 51. = L. scabra, Linn. var. 244
Castanea (Littorina), Ad. & Rve. Voy. Samarang., p. 49, t. 11, f. 8, 1848. = L. Sitchana, Phil. var. 241
Castanea (Littorina), Desh. Anim. sans Vert., ix, p. 206. = L. obligata, Say. 241
Castanea (Planaxis), Smith. Zool. Proc., 41, 1872. ? = P. nigra, Quoy, var. 278
Catenulatus (Modulus), Phil., 1847. Kust. Conch., p. 110, t. 18, f. 4. = M. unidens, Lister. 261
Cecillei (Littorina), Phil. Zeitsch. für Malak., p. 78, 1851, . 260
Cereus (Fossarus), Watson. Journ. Linn. Soc., xv, p. 97, 1881. 274
Cerodes (Modulus), A. Ad. Zool. Proc., p. 204, 1850, . . 261
Cicatricosa (Rissella), Jonas. Phil. Abbild., iii, Trochus., t. 2, f. 2. = R. melanostoma, Gmel. 262
Cidaris (Modulus), Rve. Elements of Conch., t. 13, f. 63, 1849. = M. tectum, Gmel. 260
Cincta (Cithna), Jeffreys. Zool. Proc., p. 111, t. 20, f. 8, 1883, 269
Cincta (Littorina), Gld. Bost. Proc., ii, 1847. = L. Sitchana, Phil. var. 241
Cincta (Littorina), Quoy. Voy. Astr., ii, p. 481, t. 33, f. 20, 21, 1832. = L. Mauritiana, Lam. 247
Cinerea (Littorina), Pse. Amer. Journ. Conch., v, p. 78, t. 8, f. 14, 1869. = L. millegrana, Phil. var. 260
Cingulata (Cithna), Verrill. Trans. Conn. Acad., vi, p. 182, t. 32, f. 7, 1884, ... 269
Cingulata (Littorina), Pfr. C. B. Ad. Cat., p. 19. = L. floccosa, Beck. 251
Cingulata (Littorina), Phil. Zool. Proc., p. 142, 1845. = L. scabra, Linn. var. 244
Cingulatus (Planaxis), A. Ad. Thes. Conch., p. 175, f. 39, . 278
Cingulatus (Planaxis), Gld. (not Adams.) Bost. Proc., vii, p. 385, 1861. = P. Gouldi, E. A. Smith. 280
Cingulifera (Littorina), Dkr. Zeitsch. für Malak., p. 166, 1845, ... 250
Cinguliferus (Fossarus), A. Ad. Ann. & Mag., v, p. 410, 1860, ... 273

PAGE.
Circinata (Planaxis), Lesson. Rev. Zool. Cuv., p. 187, 1842.
= P. planicostatus, Sowb. 277
Cithna, A. Ad. Zool. Proc., p. 113, 1863, . . . 234, 268
Clathratus (Fossarus), A. Ad. (not Phil.). Ann. & Mag., v, p. 410, 1860, ... 274
Clathratus (Fossarus), Phil. Enum. Moll. Sicil., ii, p. 148, t. 25, f. 5. = F. costatus, Brocc. 272
Clathrella, Recluz. Journ. de Conch., p. 251, 1864.
= Phasianema, S. Wood. 235
Clausa (Lacuna puteolus, var.), Jeffreys. Brit. Conch., iii, 349, ... 265
Coccineus (Limax), Martyn. Univ. Conch., t. 68.
= Littorina obesa, Sowb. 247
Columellaris (Littorina), d'Orb. Moll. Cuba, t. 13, f. 18–20, 1840, ... 245
Columna (Littorina), Jonas (in letter), Phil. Abbild., iii, p. 14, t. 6, f. 15, 1847, ... 251
Compacta (Lacuna), Carp. Ann. & Mag., xiv, p. 428, 1864.
= L. divaricata, Fabr. 266
Concolor (Littorina scabra, var.), Weink. Conch. Cab., p. 37, t. 4, f. 8–11, 1882, ... 243
Conica (Alaba), Carp. Mazatlan Shells, p. 368, . . . 282
Conica (Lacuna puteolus, var.), Jeffreys. Brit. Conch., iii, 349, ... 265
Conica (Littorina), Phil. Zool. Proc., p. 141, 1845.
= L. undulata, Gray. 244
Conicus (Cremnoconchus), Blanford. Journ. Asiat. Soc. Bengal, xxxix, p. 10, t. 3, f. 3, 1870, ... 256
Conoidalis (Risella), Pease. Amer. Journ. Conch., iii, 287, 1867, ... 263
Conoideus (Fossarus), A. Ad. Zool. Proc., p. 111, 1863, . 273
Conradia, A. Ad. Ann. & Mag., v, p. 409, 1860, . . 236, 273
Conspersa (Littorina), Phil. Abbild., t. 4, f. 14, 1847.
= L. aspera, Phil. var. 249
Convexior (Modulus), Beck, Mss. Mörch, Mal. Blatt., xxiii, p. 129, 1876, ... 262
Cornea (Diala), A. Ad. Ann. & Mag., viii, p. 243, 1861; x, 295, 1862. = Alaba. 282
Cornea (Phasianella), Brown. Conch. Gt. Brit.
= Lacuna divaricata, Turt. 266
Coronaria (Littorina), Lam. Anim. sans Vert., vii, p. 33, . 257
Coronatus (Tectarius), Valenc. in Humboldt. Rec. d'Observ. de Zool., p. 271. = Littorina bullata, Mart. . . . 257
Costata (Adeorbis), Garr. Calif. Proc., p. 103.
= Fossar Garrettii, Pse. 272
Costatus (Fossarus), Brocc. Conch. Foss. Subapp., p. 300, t. 1, f. 11, ... 272

PAGE.

Costatus (Fossarus), Scacc. Osserv. Zool., p. 24.
= F. ambignus, Linn. 271
Costulata (Cithna tenella, var.), Jeffreys. Zool. Proc., p. 110, 1883, ... 268
Costulata (Littorina), Souleyet. Voy. Bonite., ii, 561.
= L. varia, Sowb. 246
Costulata (Littorina tenebrosa var.), Midd. Malac. Ross., ii, p. 61, t. 8, f. 6–8. = L. rudis, Donov. 241
Couthouyia, A. Ad. Ann. & Mag., v, p. 410, 1860, . 236, 273
Crassa (Risella), Dkr. Mal. Blatt., viii, p. 42, 1862.
?= R. melanostoma, Gmel. 262
Crassior (Lacuna), Montg. Test. Brit. Suppl., p. 127, t. 20, . 267
Crassispira (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 39, 1872, ... 277
Cremnobates, Blanford. Ann. & Mag., xii, p. 184, 1868.
= Cremnoconchus, Blanford. 231
Cremnoconchus, Blanford. Ann. & Mag., iii, p. 343, 1869, . 231
Crosseana (Natica), Kleciak in Weink. Conch. Mittelm., ii, p. 257, 1868. = Megalomphalus azonea, Brus. . . . 268
Cubana (Littorina), Weink. Conch. Cab., p. 68, t. 9, f. 2, 3, 1882. ?= L. columellaris, Orb. var. 246
Cumingii (Fossarus), A. Ad. Zool. Proc., p. 187, 1853, . . 274
Cumingii (Littorina), Phil. Zool. Proc., p. 138, 1845, . . 257
Cyclocheila, Conrad. 233
Cyclostoma (Limnotrochus), Bourg. Not. Moll. Lac Tanganyika, p. 60, 1885, ... 265

Debilis (Littorina), Phil. Zool. Proc., p. 140, 1845.
= L. zieczac, Chemn. 251
Decollata (Littorina), Krauss (in letter), Phil. Abbild., t. 4, f. 3, 1847. = L. Africana, Krauss. 249
Decollata (Planaxis), Quoy. Voy. Astr., ii, p. 489, t. 33, f. 33–34, 1832, ... 280
Decorata (Lacuna), A. Ad. Ann. & Mag., viii, p. 304, 1861, 270
Decussata (Litiopa), Gould. Bost. Proc., iii, p. 75, 1848.
= L. melanostoma, Rang. 281
Decussatus (Fossarus), A. Ad. Ann. & Mag., v, p. 410, 1860, 273
Delicatula (Fossarus reticulatus, var.), Nevill. Hand List, p. 166, 1884. 273
Delicatula (Littorina conica, var.), Nevill. Hand List, p. 149, 1884. = L. undulata, Gray. 244
Depressa (Megalomphalus), Sequenza. Bull. Real Comit. Geol. Ital., ii, p. 382, 1874; Jeffreys, Zool. Proc., 41, 1885, 267
Diala, A. Ad. Ann. & Mag., viii, p. 242, 1861, . . 239, 282
Diemenensis (Littorina), Quoy. Voy. Astr., ii, p. 479, t. 33, f. 8–11, 1832. = L. Mauritiana, Lam. 247
Dilatata (Littorina), d'Orb. Moll. Cuba, i, p. 207, t. 14, f. 20–23, 1853. = T. nodulosus, Gmel. 258

PAGE.
Diminutivus (Trochus), Rve. Conch. Icon., xiii, f. 57, 1861.
= Risella tantilla, Gld. 263
Disculus (Modulus), Phil. Zeitsch. für Malak., 51, 1846, . 261
Divaricata (Lacuna), Fabr. Faun. Græn., p. 392, 1780, . 266
Divisa (Litiopa), Carp. Zool. Proc., p. 234, 1855.
= L. melanostoma, Rang. 281
Doliaris (Fossarus), A. Ad. Zool. Proc., p. 112, 1863, . . 273
D'Orbignyana (Littorina), Phil. Abbild. iii, f. 12.
= L. ziczac, Chemn. 251
Doriæ (Alaba), Issel. Nevill, Hand List, 183, . . . 282
Dorsuosus (Modulus), Gould. Mex. & Cal. Shells, 10, t. 14, f. 12. = M. disculus, Phil. 261
Duplicatus (Modulus), A. Ad. Zool. Proc., p. 204, 1850, . 262

Ebeninus (Planaxis), Menke. Troschel, Archiv für Naturg., i, 162, 1852, ... 280
Eboreus (Planaxis), E. A. Smith. Ann. & Mag., ii, p. 42, 181. = P. lineatus, DaCosta. 278
Ecanaliculata (Lacuna divaricata, var). Jeffreys, Jour. Linn. Soc. xii, 106, ... 266
Echinata (Littorina), Anton. Verz. p. 53,
= L. miliaris, Quoy. 259
Echinella, Swainson, Treat. Malac. 211, 352, 1840, . . 231
Echinulatus (Trochus), Kien. Species. t. 43, f. 2.
= Littorina Cumingi, Phil. 257
Edecollata (Cremnoconchus conicus, Var). Nevill, Hand List. p. 171, 1885, ... 256
Effusa (Lacuna porrecta, var). Carp. Ann. & Mag. xiv, p. 428, 1864, ... 266
Effusa (Litiopa), C. B. Ad. Contrib. Conch. p. 71, 1849–1852, 281
Electrina (Diala), Carp. Ann. & Mag. 478, 1864, . . 284
Elegans (Fossarus), Verill & Smith. Conn. Trans. v, p. 522, t. 47, f. 38, 1882, ... 271
Elegans (Littorina bullata, var). Phil. Abbild. und Beschreib., t. 2, 1846, ... 257
Elegans (Littorina), Risso. Hist. iv, f. 46, 1826,
= L. neritoides, Linn. 252
Encaustica (Planaxis), E. A. Smith. Ann. & Mag. ix, p. 38, 1872. = P. Savignyi, Desh. var. 277
Epheria, (Leach), Gray. Ann. Mag. N. Hist. xx, 1847, . 233
Erronea (Littorina), Nevill, Hand List. p. 152, 1884,
= L. Novæ Zelandiæ, Reeve. 249
Ersilia, Monts. Conch. Med. p. 33, 1872, ... 233
Exæquata (Lacuna porrecta, var). Carp. Ann. & Mag. xiv, p. 428, 1864, ... 266
Exarata (Littorina), Phil. Abbild., iii, p. 57, t. 7, f. 8, 1848,
= L. irrorata, Say. 246
Excavatus (Fossarus), C. B. Ad. Ann. N. Y. Lyceum, p. 392, 274

PAGE.
Excavatus (Fossarus), Monts. Enum. 37, ... 268
Exigua (Littorina), Dkr. Mal. Blatt. vi, p. 226, 1860,
= L. granularis, Gray. 260
Expansa (Lacuna puteolus, var). Jeffreys, Brit. Conch. iii, 350, 265

Fabalis (Littorina), Turton. Zool. Journ. ii, p. 366, t. 13, f. 16. = L. obtusata, Linn, var. 253
Fairbanki (Cremnoconchus), Blanf. Conch. Ind. t. 146, f. 7, = C. conicus' Blanf. 256
Fasciata (Lacuna), Ad. Linn. Trans. v, t. 1, f. 20, 1.
= L. puteola, Turton. 265
Fasciata (Littorina angustior, var). Mörch, Mal. Blatt. xxiii, p. 139, 1876. = L. ziczac, Chemn. 251
Fasciata (Littorina), Gray. Beechey's Voy. p. 139, 1839.
= L. varia, Sowb. 246
Fasciatus (Planaxis), Pse. Amer. Journ. Conch. iv, p. 102, t. 12, f. 17, 1868. = Pl. lineatus, DaCosta. 278
Fecjeensis (Littorina), Rve. Conch. Icon. f. 82, a. b. 1857.
= L. miliaris, Quoy. var. 259
Felina (Alaba), A. Ad. Ann. & Mag. x, p. 297, 1862, . . 282
Fenestrata (Isapis), Carp. Ann. & Mag. xiv, p. 429, 1864, . 272
Fenestratus (Fossarus), A. Ad. Zool. Proc. p. 110, 1863, . 274
Filosa (Littorina), Sowb. Gen. of Shells. No. 37, f. 5.
= L. scabra, Linn. Var. 244
Filosus (Trochus), Helbling. Privät. Böhmen, iv, 1779.
= Modulus lenticularis, Chemn. 261
Fimbriata (Risella), Phil. Zeitsch. für Malak. p. 32, 1851.
= R. melanostoma, Gmel. 262
Fissilabra, Brown, Edinb. Jour. Nat. Hist. 1836,
= Quoyia, Desh. 1830. 238
Flammea (Littorina), Phil. Abbild. ii, t, 6, f. 21, . . . 245
Flammulata (Littorina scabra, var), Phil. Abbild. ii, 222, 1847. 243
Flava (Littorina), Brod. Zool. Journ. p. 345, 1832,
= L. columellaris, Orb. Var. 246
Flavescens (Littorina angulifera, var), Phil. Abbild. ii, 22, 1847. = L lineata, Gmel. 243
Flavescens (Risella), Phil. Zeitsch. für Malak. p. 39, 1851.
= R. melanostoma, Gmel. 262
Floccosa (Littorina), Beck. Mörch. Mal. Blatt. p. 140, 1876.
= L. ziczac, Chemn. var. 251
Floridanus (Modulus), Conr. Amer. Journ. Conch. v, p. 107, t. 12, f. 6, 1870, ... 260
Fortisulcata (Littorina conspersa, var), Nevill. Hand List Moll. p. 138, 1884, ... 249
Fortunei (Littorina), Rve. Conch. Icon. f. 42, a. b. 1857.
= L. flammea, Phil. 245
Fossarina, A. Ad. & Angas. Zool. Proc. p. 423, 1863, 236, 275

PAGE
Fossariopsis, Laube, 1870, ... 236
Fossarus, Phil. Archiv für Naturg. i, p. 47, 1841, 235, 271
Foveatus (Fossarus), C. B. Ad. Ann. Lyceum, p. 397, . . 274
Fraseri (Littorina), Rve. Conch. Icon. f. 47, 60, 1857,
= L. punctata, Gmel. var. 248
Frigida (Lacuna), Lovén. Index, Moll. Scandin. p. 23.
= L. divaricata, Fabr. 266
Fulva (Alaba), Watson. Challenger Exped, xv, p. 571, t. 42,
f. 5, 1886, ... 284
Fulva (Planaxis), A. Ad. Zool. Proc. p. 271, 1851.
= P. mollis, Sowb. var. 279
Funiculata (Fossarina), Tenison-Woods. Roy. Soc. Victoria,
xvii, p. 81, t. f. 6–8, 1881, ... 275
Fusca (Lacuna,) Binn. Invert. Mass. p. 263.
= L. divaricata, Fab. 266
Fusca (Littorina), Pfr. Arch. für Naturg. 254, 1840.
= L. mespilum, Muhlf. 252

Gaidei (Littorina), Montr. Journ. de Conch. xxvii, p. 26, t. 3,
f. 3, 3a. 263
Garrettii (Fossar), Pease. Amer. Journ. Conch. iv, p. 128,
1868, ... 272
Gigantea (Cremnoconchus, carinatus, var), Nevill Hand List.
p. 173. 1885, ... 256
Giraudia, Bourg. Not. Moll. Lac Tanganyika, p. 61, 1885. 239, 285
Giraudi (Limnotrochus), Bourg. Not. Moll. Lac Tanganyika,
p. 59, 1885, ... 265
Giraudi (Reymondia), Bourg. Not. Moll. L. Tanganyika,
65, 1885, ... 285
Glabella (Hela), Monts. Atti Acad. Palermo, p. 25, 1875, . 270
Glabrata (Littorina), Phil. Zool. Proc. p. 140, 1845,
= L. ziczac, Chemn. 251
Glabrata (Paludina), Pfr. Naturg. Deutsch. Conch. iii, p. 46,
t. 8, f. 9, 10. = Littorina Neritoides, Linn. . . . 252
Glacialis (Lacuna) Möller. Index. Noll. Grœnl. p. 9, 1842, . 267
Glaucocincta (Littorina), Beck. Mss.
= L. floccosa, Beck, ... 251
Glans (Littorina), Rve. Conch. Icon. f. 62, a. b. 1857.
= T. granosus, Phil. 259
Globosa (Littorina), Dkr. Zeitsch. für Malak. p. 165, 1845.
= L. striata, King. 247
Globosus (Fossarus), A. Ad. Zool. Proc. p. 113, 1863, . . 270
Goniocheila (Styliferina), A. Ad. Ann. & Mag. vi, p. 335,
1860; x, p. 299, 1862, ... 284
Gottoina, A. Ad. Zool. Proc. p. 112, 1863, . . 236, 274
Gouldi (Planaxis), E. A. Smith. Ann. & Mag. ix, p. 42, 1872, 280
Gouldiana (Littorina), Weink. Conch. Cab. p. 105, 1882.
=L. Sitchana, Phil. 241

PAGE.

Gracilior (Lacuna), Metcalfe. Thorpe, Brit. Mar. Conch. f. 86.
= L. divaricata, Fabr. 266
Grandidieriana (Giraudia), Bourg. Not. Moll. Lac Tanganyika, p. 63, 1885, ... 285
Grandinatus (Trochus) Chemn. Conch. Cab. f. 1639.
= Littorina bullata, Martyn. 257
Grandis (Littorina), Middendorff. Beitr. Malac. Rossica. Pt. 2, p. 57, 1849, ... 240
Grano-costata (Littorina), Rve. Conch. Icon. f. 79, 1857.
= T. miliaris, Quoy. 259
Granosa (Littorina), Phil. Abbild. iii, p. 65, t. 7, f. 14, 1848, 259
Granularis (Littorina), Gray. Beechey's Voy. p. 140, 1839, 260
Granulum (Fossarus), Brugnone. Misc. Malac. p. 13, f. 25, 1873, ... 272
Granum (Lævilitorina), Pfr. Natur. Mus. Hamburg, p. 87, t. 1, f. 10, 1886, ... 254
Grateloupiana (Litiopa), Drouet. Moll. Acores, p. 28, t. 1, f. 1–2, 1858. = L. melanostoma, Rang. 281
Grisea (Planaxis), Brocchi. Cat. Conch. Raccolte G. Forni, p. 22, Savigny, Egypt, t. 4, f. 29.
= P. Savignyi, Desh. 277
Grisea (Risella), Phil. Zietsch. für Malak. p. 31, 1851.
=R. melanostoma, Gmel. 262
Grœnlandica (Littorina), Menke. Synopsis, p. 45, 1830.
= L. obligata, Say. 241
Gundlachi (Littorina), Phil. Zeitsch. für Malak. p. 150, 1848.
? = L. mespilum, Muhlf. 252
Guttata (Littorina), Phil. Abbild. ii, 29, t. 4, f. 7, . . 248
Guttata (Littorina), Rve. Conch. Icon. f. 76.
= L. punctata, Gmel. 248

Haloconcha, Dall. Proc. U. S. Nat. Mus. p. 212, 1886, 234, 267
Hanleyi (Planaxis), Smith, Ann. & Mag. ix, p. 41, 1872.
= P. nigra, Quoy. 278
Heberti (Lacuna), Velain. Archiv. Zool. Exper. vi, p. 113, t. 3, f. 13, 1877, ... 270
Hela, Jeffreys. Ann. and Mag. vi, p. 76, 1870; Zool. Proc. 1883.
=Cithna, A. Ad., ... 234
Heliciella, O. E. Costa, 1861.
= megalomphalus, Brus, (in part.) 234
Hermannseni (Planaxis), Dkr. Ind. Moll. Guin. p. 16, t. 2, f. 33, 34, 1853. = P. lineatus, Linn. 279
Hersilia, Monts. Conch. Med. p. 33, 1872; Conch. Medit. 54, 1884. = Ersilia, Monts. 233
Hidalgoi (Quadrasia), Crosse, Journ. de Conch. p. 161, t. 8, f. 7, 7a–c, 1886, ... 379
Hinea (Leach) Gray. Zool. Proc. 138, 1847, . . 238, 279

PAGE.
Hisseyiana (Littorina), Tenison-Woods. Roy. Soc. Tasm. p. 148, 1875, ... 255
Holcostoma, H. & A. Ad. Zool. Proc. p. 174, 1853, 238, 280
Horei (Reymondia), Smith. Ann. Mag. N. Hist. vi, 427, 1880, 285

Imbricata (Alaba), A. Ad. Ann. & Mag. x, p. 297, 1862, . 282
Imbricata (Risella), Gray. Zool. Beechey's Voy. p. 141, 1839. = R. melanostoma, Gmel. 262
Imperforatus (Fossarus), Nevill. Hand List. p. 165, 1884, . 274
Incarnata (Littorina Grœnlandica, var). Lovén. (in Letter). Abbild. t. 1, f. 11–13. 241
Incerta (Alaba) d'Orb. Cuba, 2, p. 218, t. 16, fig. 7–9, . 282
Incisus (Planaxis), Phil. Zeitsch. für Malak. p. 92, 1851, . 280
Ineptus (Planaxis), Gld. Bost. Proc. vii, p. 385, 1860. = P. lineatus, Da Costa. 278
Inflata (Alaba), A. Ad. Ann. & Mag. x, p. 297, 1862, . 282
Inflata (Hela), Monts. Not. Conch. Medit. p. 38, 1872, . 270
Inflata (Lacuna), A. Ad. Ann & Mag. viii, p. 304, 1861, . 270
Infracostata (Risella), Issel. Mal. mar Rosso, p. 195, 1869, Savigny, Egypt. t. 5, f. 40, ... 264
Insignis (Fossarus), G. & H. Nevill. Journ. Asiat. Soc. Beng. xl, Pt. 2, p. 4, 5. t. 1, f. 9, 1871. = F. reticulatus, A. Ad. 273
Interjunctus (Fossarus), Jeffreys, Mss. Zool. Proc. 41, 1885. = F. reticulatus, S. Wood. 272
Intermedia (Lacuna) Locard. Cat. 290. = puteolus, Turton. 265
Intermedia (Littorina), Phil. Zool. Proc. p. 141, 1845. = L. scabra, Linn. var. 244
Iphitus, Jeffreys. Zool. Proc. p. 113, 1883, . . . 236, 274
Irrorata (Littorina), Rve. Conch. Icon. f. 56 a-b, 1857. = L. aspera, Phil. 249
Irrorata (Littorina), Say. Journ. Phila. Acad. ii, p. 239, . 246
Isapis, H. & A. Ad. Gen. of Moll. i, 320, 1854, . 235, 272
Isseli (Risella), Semper, in Sched. Issel, Mar. Risso. 194, Savigny, Egypt. t. 5, f. 35, *not* 35 *c*. 263

Jamaicensis (Littorina), C. B. Ad. Contrib. p. 71, 1849–1852. = L. carinata, d'Orb. 251
Japonicus (Fossarus), A. Ad. Ann. & Mag. viii, p. 139, 1861, = F. costatus, Brocc. 272
Jeffreysiana (Litiopa), Issel. Mar Rosso. 290, t. 5, f. 4, 1869, 281
Jugosus (Turbo), Mont. Test. Brit. t. 20, f. 2. =Littorina rudis, Maton. Var. 241

Kielmannseggi (Risella), Zelebor. Zool.-Bot. Vereins Vienna, xvi, p. 913, 1866. = R. melanostoma, Gmel. . . . 262
Kirki (Limnotrochus,) E. A. Smith. Ann. & Mag. vi, 426, 1880, ... 264

PAGE.

Knysnaensis (Littorina), Krauss. Phil. Abbild. t. 4, f. 4, 1847.
= L. Africana, Krauss. 249
Krebsii (Modulus), Mörch. Mal. Blatt. xxiii, p. 129, 1876, . 262
Kurila (Littorina), Middendorff. Bull. Acad. St. Petersburg, vii, No. 16. = L. Sitchana, Phil. 241
Kutschigi (Stomatia), Brus. Verhand. Zool. Bot. Ges. Wien. p. 29, 1865. ? = Fossarus ambiguus, Linn. . . . 271

Labiosa (Turbo), Brown.
= Littorina patula, Thorpe. 242
Labiosa (Lacuna) Lovén. Index Moll. Scand. p. 23.
= L. divaricata, Fab. 266
Labiosus (Planaxis), A. Ad. Zool. Proc. p. 272, 1851.
= P. lineatus, Da Costa, Var. 279
Lacuna (Helix), Mont. Test. Brit. p. 428, t. 13, f. 6.
= Lacuna puteola, Turt. 265
Lacuna, Turton. Zool. Journ. iii, p. 190, 1827, . 233, 265
Lacunaria, Conrad. Am. Jour. Conch. ii, 77, 1866. . . 234
Lacunaria, Dall, (not Conr). Proc. U. S. Nat. Mus. vii, p. viii, (errata) 1884. = Haloconcha, Dall. 234
Lacunella Dall. Proc. United States Nat. Mus. vii, p. 344, 1884. = Haloconcha, Dall. 234
Lactea (Lacuna puteolus, var), Jeffreys. Brit. Conch. iii, 349, 265
Lacunella. Desh. Foss. Paris Basin, 1861, ... 234
Lævigatum (Buccinum), Wood. Ind. Test. Supp. 1828.
= Planaxis mollis, Sowb. 279
Lævilitorina Pfr. Natur. Mus. Hamburg, p. 81, 1886, 230, 254
Lævior (Littorina carinifera, var), Nevill. Hand List. p. 151, 1884, ... 244
Lævis (Littorina), Phil. Zool. Proc. p. 140, 1845.
= L. Mauritiana, Lam. 247
Lævis (Littorina), Rve. (not Phil). Conch. Icon. f. 95.
= L. Mauritiana, Lam. 247
Lamellilitorina, Tryon. 230, 253
Lamellosa (Littorina), Montrouz. Journ. de Conch. ix, p. 273, t. 11, f. 3, 1861, ... 271
Lanoci (Fossarus), Baudon. Journ. de Conch. p. 348, 1857.
= F. ambiguus, Linn. 271
Latifasciata (Lacuna), A. Ad. Ann. & Mag. p. 350, 1863, . 270
Lauta (Diala), A. Ad. Ann. & Mag. x, p. 298, 1862, . . 282
Laxata (Stenotis), A. Ad. Ann. & Mag. xi, p. 351, 1863, . 268
Legrandi (Fossarina), Petterd. Quar. Journ. Conch. ii, p. 104, 1879, ... 276
Leithi (Diala), E. A. Smith. Zool. Proc. p. 539, 1875, . . 283
Lemniscata (Littorina), Phil. Zool. Proc. p. 139, 1845.
= T. nodosus, Gray. 259
Lenticularis (Trochus), Chemn. Conch. Cab. v, f. 1665, 1781, 261

PAGE.

Lepida (Littorina), Gld. Bost. Proc. p. 83, 1849.
= L. scutulata, var. 250
Lepida (Styliferina), A. Ad. Ann. & Mag. x, p. 299, 1862, . 284
Lepidula (Lacuna), A. Ad. Ann. & Mag. xi, p. 350, 1863. . 270
Leucostica (Diala), A. Ad. Ann. & Mag. viii, p. 243, 1861; x, 295, 1862. = Alaba. 282
Leucostica (Littorina), Phil. Abbild. t. 3, f. 11, 1847.
? = L. Africana, Krauss. 249
Leucostoma, Swains, Treat. Malac. 172, 336, 1840.
= Quoyia, Desh. 1830. 238
Limata (Littorina), Lovén. Ind. Moll. Scand. p. 22, No. 164.
= L. littoralis, Linn. var. 242
Limax (Littorina), Gray. Beechey's Voy. p. 139, 1839.
= L. obesa, Sowb. 247
Limnæiformis (Litiopa), Watson. Journ. Linn. Soc. xv, p. 123, 1881, ... 283
Limnotrochus, E. A. Smith. Ann. & Mag. 5 ser. vi, 420, 1880, ... 232, 264
Lineata (Littorina), Gmel. Syst. Nat. p. 3493, . . . 243
Lineata (Phasianella), Lam. An. sans Vert. Edit. Desh. ix, 243. = Littorina ziczac, Chemn. 251
Lineatus (Planaxis), Da Costa, Brit. Conch. p. 130, 1776, . 278
Lineolatus (Planaxis), Gould. Bost. Proc. iii, p. 118, 1849.
= P. lineatus, Da Costa. 278
Liratus (Fossarus), A. Ad. Ann. & Mag. 1860, . . . 273
Litiopa (Buccinum), Mrs. Gray. Figs. Moll. Anim. i, t. 24, f. 1, 2. = Litiopa melanostoma, Rang. 281
Litiopa, Rang. Ann. des Sci. Nat. xvi, p. 303, 1829, 238, 280
Litorea (Nerita), Fabricuis. Faune Grönl, p. 403.
= Littorina obligata, Say. 241
Littoralis (Littorina), Forbes & Hanley. Brit. Moll. iii, p. 45, t. 84, f. 3–7. = L. obtusata, Linn. 253
Littoralis (Littorina) Linn. Syst. Nat. Edit. 12, 1153, . . 242
Littoreus (Turbo), Linn. Syst. Nat. Edit. xii, p. 1832, . 229, 240
Littorina, Fer. Tabl. Syst. p. xxxiv, 1821, . . 229, 230, 240
Littorinopsis, Beck, Mss. Mörch. Mal. Blatt. xxiii, 135.
= Melaraphe, Muhlf. 230
Livida (Risella), Phil. Zeitsch. für Malak. p. 131, 1846.
= R. melanostoma, Gmel. 262
Lividus (Modulus), Phil. Zeitsch. für Malak. vi, p. 168, 1849,
? = M. disculus, Phil. 261
Longispira (Planaxis), E. A. Smith. Ann. & Mag. ix, p. 45, 1872. = P. lineatus, Da Costa. 279
Lucida (Alaba), A. Ad. Ann. & Mag. x, p. 297, 1862, . . 282
Luctuosum (Littorina), Rve. Conch. Icon. f. 65, 1857.
= L. Mauritiana, Lam. 247
Lucullana (Rissoa), Scacc. Catal. Conch. 14.
= Fossarus ambiguus Linn. 271

PAGE.
Lunata (Littorina), A. C. Lea, Bost. Proc. p. 205, 1844, . 255
Lutea (Littorina scabra, var), Phil. Abbild. t. 5, f. 6, 2847, . 243
Lutea (Risella), Quoy. Voy. Astr. iii, f. 271. t. 62, f. 8–11.
=R. melanostoma, Gmel. 262
Lutea (Tectarius), Gld. Bost. Proc. viii, p. 14, 1862, . . 260
Luteola (Littorina), Quoy. Voy. Astr. ii, p. 477, t. 33, f. 4, 7, 1832. ? = L. flammea, Phil. 245

Macula (Diala), Recluz. Nevill, Hand. List. 180.
= L. semistriata, Phil. 282
Maculata (Litiopa), d'Orb. Moll. Cuba, ii, p. 149.
= L. melanostoma, Rang. 280
Maculosus (Fossarus), Carp. Mazatlan Shells, p. 355, . . 273
Malaccana (Littorina), Phil. Abbild. t. 6, f. 17, 1847.
= T. nodulosus, Gmel. 258
Mamillata (Diala), Carp. Mazat. Cat. 412.
= D. paupercula, C. B. Ad. 284
Mandschurica (Littorina), Schrenk. Moll. Amur Land. p. 333, t. 14, f. 14–20, 1859–1867.
= L. Sitchana, Phil. 241
Maravignia, Aradas & Maggiore. Atti Acad. Genova., xvii, 42, 1840. = Fossarus, Phil. 235
Margaritifera (Lacuna), Watson. Journ. Linn. Soc., xv, p. 97, 1881. = Cithna tenella, Jeffr., var. costulata. . . 268
Marmorata (Littorina), Pfr. Arch. für Naturg., i, p. 81, 1839.
= L. tenebrosa, Mont. 242
Marmorata (Littorina picta, var.), Phil. Abbild., 3, f. 26, 1846. = L. planaxis, Nutt. 248
Marmorea (Diala), Cpr. Calif. Proc., iii. p. 218, 1868, . . 283
Martensi (Alaba), Issel. Mar Rosso., 206, 1869. . . . 282
Mauritiana (Littorina), Lam. Anim. sans Vert., ii, p. 244, 246, 247
Mediocris (Fossarus), Folin. Les Meleagrinicoles, p. 59, t. 5, f. 8, 1867, ... 271
Mediterranea (Lacuna), Monts. Test. Sicil., 15, 1869.
= Ersilia. Monts. Notizie Conch. Medit., 1872, . . . 270
Meloria (Leach), Gray. Syn. Brit. Mus., 60–90, 1842, . 233, 267
Megalomphalus, Brus., 1871. = Fossarus, Phil., . . 234, 267
Megasoma (Fossarus), C. B. Ad. Ann. Lyceum, p. 398, . 274
Melanacme (Littorina), E. A. Smith. Journ. Linn. Soc., xii, p. 552, t. 30, f. 21, 1876. ? = L. Novæ-Zelandiæ, Rve. . 249
Melanoides (Monoptygma), Lea. Contrib. Geol., 185, 1833.
= Quoyia decollata, Quoy. 280
Melanostoma (Litiopa), Rang. Man. Hist. Moll., p. 129, . 280
Melanostoma (Littorina), Gray. Beechey's Voy., p. 140, 1839, 245
Melanostoma (Littorina), Kryn. Bull. Soc. Imp. Moscow, p. 60, 1837. = L. neritoides, Linn. 252
Melanostoma (Risella), Gmel. Syst. Nat., p. 3581, 1789, . 262
Melanura (Alaba), C. B. Ad. Contr. Conch., p. 116, 1850, . 281

PAGE.
Melaraphe, Mühlf. Menke, Synopsis, 23, 1828, . . 230, 243
Meleagris (Littorina), Beck. Potiez & Mich. Gal. Douai, i, p. 311, 1836, ... 248
Menkeanus (Planaxis), Dkr. Mal. Blatt., p. 41, 1862. = P. sulcatus, Born. Ann. & Mag., xvi, 47, 1885, . . 276
Mespilum (Littorina), Muhlf. Verh. Berl. Ges. Nat., i, p. 219, t. 8, f. 8, 1824, ... 252
Michaui (Quoyia), Cr. & Fisch. Journ. de Conch., p. 375, t. 13, f. 6, 1863. = Q. decollata, Quoy. 280
Miliaris (Littorina), Quoy. Voy. Astr., ii, p. 484, t. 33, f. 16–19, 1832, ... 259
Millegrana (Littorina), Phil. Abbild., iii, p. 65, t. 7, f. 15, 1848. = T. granularis, Gray. 260
Minima (Turbo), Gray MSS, Wood. Index. Test., t. 6, f. 29, 252
Minor (Conradia doliaris, var.), Nevill. Hand List, p. 169, 1885, ... 273
Minor (Litiopa ventrosa, var.), Nevill. Hand List, 178, 1885, 281
Minor (Littorina scabra, var.), Weink. Conch. Cab., p. 37, t. 4, f. 16–18, 1882, ... 244
Minutus (Fossarus), Mich. Bull. Soc. Linn. Bord., ii, p. 122, t. 2, f. 7, 8, 9, 1828. = F. costatus, Brocc. . . . 272
Mirabilis (Fossar), Nevill. Hand List, p. 165, 1884, . . 274
Modesta (Littorina), Menke. Zeitsch. für Malak., p. 164, 1850. = L. conspersa, Phil. 249
Modulus, Gray. Syn. Brit. Mus., 1840, ... 232, 260
Modulus (Trochus), Linn. Syst. Nat., x, 1758. = M. lenticularis, Chemn. 261
Mollis (Planaxis). Sowb. Genera of Shells, i, f. 2, 1824, . 279
Monile (Alaba), A. Ad. Ann. & Mag., x, p. 296, 1862, . 283
Monilifera (Littorina), Souleyet. Voy. Bonite, ii, p. 559, t. 31, f. 37–39, 1852. = L. nodulosa, Gmel. 258
Montagui (Lacuna), Turton. Zool. Journ., iii, p. 191, 1827. = L. puteola, Turt. 265
Monterosatoi (Megalomphalus), Granata. Desc. esp. nouv., 1877. = Fossarus excavatus, Monts. 268
Montrouzieri (Littorina), Fisch. Journ. de Conch., xxvi, t. 3, f. 6, ... 259
Moreleti (Modulus), Fischer. Journ. de Conch., xxx, p. 109, t. 7, f. 2, ... 261
Multicostatus (Fossarus), Pse. Zool. Proc., p. 398, 1860, . 274
Muricata (Littorina), Linn. Syst. Nat., p. 1232, . . . 258
Mutabilis (Heliciella), O. G. Costa. Microd. Med., p. 64, t. 10, f. 4, 5, 1861. = Megalomphalus azonus, Brus. . . 268
Mutans (Alaba), Carp. Mazatlan Shells, p. 369, . . . 282

Nana (Littorina zebra, var.), Nevill. Hand List Moll., p. 140, 1884, ... 249
Nana (Risella), Lam. Anim. sans Vert., 1st Ed., vii, p. 30. = R. melanostoma, Gmel. 262

PAGE.

Nanus (Trochus), Quoy. (not Lam.). Voy. Astr., iii, 7, 273, t. 62, f. 5–7. = Risella picta, Phil. 262
Natalensis (Littorina), Krauss. Sudafrik. Moll., p. 102. = L. nodosa, Gray. 259
Naticiformis (Cithna), Jeffreys. Zool. Proc., p. 112, t. 20, f. 11, 1883, ... 269
Naticoides (Littorina), d'Orb. Moll. Cuba, p. 214, t. 15, f. 22, 23, 1853. = L. mespilum, Muhlf. 252
Nebulosa (Littorina), Lam. Anim. sans Vert., ix, p. 244. = L. scabra, Linn. var. 244
Neglecta (Littorina), Bean. = L. saxatilis, Johnston. . . 242
Neritiformis (Littorina), Brown. Ill. Conch., p. 18, t. 16, f. 24, 1845. = L. obtusata, Linn. var. 253
Neritoidea (Lacuna), Gld. Silliman's Journ., xxxviii, p. 197; Invert. Mass., p. 163, f. 170. = L. pallidula, DaCosta. . 265
Neritoides, Brown. Brit. Conch., 1828, ... 230, 252
Neritoides (Littorina), Linn. Syst. Nat., p. 1232, . . . 252
Neritrema, Recluz. Actes. Soc. Linn. Bord., xxvii. = Neritoides, Brown. H. & A. Ad., Gen. i, p. 314, . . 230
Newcombi (Littorina), Rve. Conch. Icon., f. 28, a, b, 1857. = L. scabra, Linn. var. 244
Nicobaricus (Planaxis), Zelebor. Zool. Bot. Vereins, Wien., xvi, p. 910, 1866, ... 279
Nigra (Planaxis), Quoy. Voy. Astr., ii, p. 491, t. 33, f. 22–24, 1832, ... 278
Nigrilineata (Littorina), Gray. Zool. of Beechey's Voy., p. 140, 1839. = L. rudis, Donov. Var. 241
Nigritellus (Planaxis), Forbes. Zool. Proc., p. 273, t. 11, f. 6, 1850, ... 278
Nigrofasciata (Risella Templiana, var.), Nevill. Hand List, p. 161, 1884, ... 264
Nina, Gray. Figs. Moll. Anim., iv, 87, 1850, . . 231, 257
Nitidula (Litiopa), Pfr. Archiv für Naturgeschichte, i, p. 255, 1840. = L. melanostoma, Rang. 281
Nodosa (Littorina), Gray. Zool. of Beechey's Voy., p. 139, 1839, ... 259
Nodulosa (Littorina), d'Orb. Moll. Cuba, i, p. 205, t. 14, f. 11–14, 1853. = L. dilatata, d'Orb. 258
Nodulosus (Turbo), Gmel. Syst. Nat. Ed., xiii, p. 3582, . 258
Novæ–Hiberniæ (Littorina), Less. Voy. Coq., p. 338, 1830. = L. scabra, Linn. 244
Novæ–Zelandiæ (Littorina), Rve. Conch. Icon., f. 74, 1857, . 249
Nucleola (Planaxis), Mörch. Mal. Blatt., xxiii, p. 126, 1876, 280
Nucleus (Purpura), Lam. Anim. sans Vert., vii, 1822, . . 277

Obesa (Litiopa), C. B. Ad. Contrib. Conch., p. 71, 1849–1852, 281
Obesa (Littorina), Sowb. Genera of Shells, No. 37, f. 6, . 247

PAGE.
Obligata (Littorina), Say. Journ. Phila. Acad., ii, p. 241.
= L. rudis, Montg. var. 241
Obliquus (Modulus), Ad. Zool. Proc., p. 204, 1850, . . 262
Obscura (Planaxis), A. Ad. Zool. Proc., p. 271, 1851.
? = P. sulcatus, Born. 276
Obsoletus (Planaxis), Menke. Zeitsch. für Malak., p. 170, 1850. = P. nigritellus, Forbes. 278
Obtusa (Isapis), Carp. 2d Report, 142, ... 273
Obtusata (Littorina), Linn. Syst. Nat. Ed., xii, p. 1232, . 252
Obtusata (Littorina tenebrosa), var.), Midd. Mal. Ross., ii, p. 63, t. 8, f. 1–5. = L. littoralis, Linn. 242
Obtusatus (Modulus), Phil. Conch. Cab., ii, 1846.
= M. tectum, Gm. var. 260
Olivacea (Cithna), Verrill. Conn. Trans., vi, p. 185, t. 29, f. 5, 1884, ... 269
Orbignyi (Fossarus), Fischer. Jour. de Conch., 256, 1864.
= F. sulcatus, Wood. 271
Ovoideus (Fossarus), Gould. Zool. Proc., 1856, . . . 273

Pagodella, Swainson, 219, 351, 1840. = Tectarius, Val. . 231
Pagodula (Alaba), A. Ad. Ann. & Mag., x, p. 297, 1862, . 282
Pagodus, Gray. Beechey's Voy., 141, 1839.
= Tectarius, Val. 231
Pagodus (Turbo), Linn. Syst. Nat. Ed., xii, p. 1234, . . 256
Pallescens (Littorina), Phil. Zool. Proc., p. 142, 1845.
= L. filosa, Sowb. 244
Palliata (Littorina), Say. Journ. Phila. Acad., ii, p. 240.
= L. littoralis, Linn. var. 242
Pallidula (Lacuna), DaCosta. Test. Brit., t. 4, f. 4, 5, 1778, . 265
Pallidula (Lacuna), Meyer & Mob. Kieler Bucht., p. 25, 1872. = L. puteolus, Turt. 265
Pallidus (Turbo), Donov. Brit. Conch., t. 178, f. 4.
= Lacuna crassior, Mont. 267
Paludinella (Littorina), Reeve. Conch. Icon., f. 84, 1857, . 255
Papillosa (Littorina), Lam. Anim. sans Vert., vii, p. 32.
= L. bullata, Martyn. 257
Parcipictus (Fossarus), Cpr. Ann. & Mag., xiii, p. 476, 1864, 274
Parva (Cochlea), DaCosta. Brit. Conch., 1798.
= Lacuna puteola, Turton. 265
Parvula (Lacuna), H. Martin MSS. Monts. Conch. Medit., 109. = Megalomphalus azonus, Brus. 268
Parvula (Lacuna), Velain. Archiv. Zool. Exper., vi, p. 113, t. 3, f. 11, 12, 1877, ... 270
Parvula (Littorina), Phil. Zeitsch. für Malak., p. 149, 1848, . 255
Parvula (Risella), Dkr. Mal. Blatt., viii, p. 42, 1862.
= R. tantilla, Gld. var. 263
Patula (Fossarina), A. Ad. & Angas. Zool. Proc., p. 425, 1863, ... 276

PAGE.
Patula (Lacuna), Thorpe. Brit. Mar. Conch., f. 83.
= L. pallidula, DaCosta. 265
Patula (Littorina), Gould. Otia Conch., p. 52.
= L. planaxis, Nutt. 248
Patula (Littorina rudis, var.), Thorpe. Brit. Mar. Conch., 259, 242
Paupercula (Diala), C. B. Ad. Panama Cat. 284
Paupercula (Littorina neritoides, var.), Monts. Ann. Mus. Civ. Genoa, ix, p. 418, 1877, ... 252
Paytensis (Littorina), Phil. Abbild., t. 3, f. 23, 1846, . . 250
Peasiella, Nevill. Hand List, p. 159, 1884, . . . 232, 263
Pedicularis (Planaxis), Lam. Anim. sans Vert., vii, p. 275.
= P. lineatus, DaCosta. 278
Pellilitorina, Pfr. Natur. Mus. Hamburg., p. 77, 1886, . 230, 255
Pellita (Littorina), Martens. Sitz-Bericht Berlin, p. 92, 1885; Natur. Hist. Hamburg, 79, 1886, ... 255
Penicillata (Littorina), Cpr. Diagn., p. 461.
= L. aspera, Phil. var. 250
Penitaria (Littorina), Wood. Nevill, Hand List, p. 142.
= L. Mauritiana, Lam. 247
Perdix (Littorina), King. Zool. Journ., p. 345, 1831.
= L. carinifera, Menke. 244
Perlatus (Trochus), Dillwyn. Desc. Cat., ii, p. 788.
= Monodonta unidens, Lister. 261
Persoluta (Fossarus reticulatus, var.), Nevill. Hand List, p. 166, 1884, ... 273
Persulcata (Planaxis ineptus, var.), Nevill. Hand List, p. 188, 1885. = P. lineatus, DeCosta. 279
Pertusa (Lacuna), Conr. Journ. Phila. Acad., vi. p. 266, t. 11, f. 19. = L. divaricata, Fabr. 266
Peruviana (Phasianella), Lam. Anim. sans Vert., vii, p. 53, . 249
Petitianus (Fossarus), Tiberi. Journ. de Conch., p. 179, 1868.
= Megalomphalus azonea, Brus. 268
Petræus (Littorina), Mtg. Test. Brit., p. 403, 1802.
= L. neritoides, Linn. 252
Petterdi (Fossarina), Braz. MSS. Crosse, Journ. de Conch., p. 303, 1870; J. C. 1871, t. 12, f. 1, ... 275
Pfeifferiana (Littorina), Weink. Conch. Cab., p. 46, t. 5, f. 15–16, 1882. = L. dilatata, d'Orb. 258
Phasianella (Alaba), Angas. Zool. Proc., p. 113, t. 13, f. 18, 1867, ... 283
Phasianella (Littorina), Phil. Zeitsch. für Malak., p. 149, 1848, ... 255
Phasianema, Searles-Wood. Ann. Mag. N. Hist., ix, 1847, 235, 272
Philippiana (Littorina), Rve. Conch. Icon., f. 22, a, b.
= L. scabra, Linn. var. 244
Philippii (Littorina), Cpr. Mazatlan Shells, p. 349.
= L. aspera, Phil. var. 249

PAGE.
Picea (Littorina), Rve. Conch. Icon., f. 83, 1857.
= L. Africana, Krauss, var. 249
Picta (Diala), A. Ad. Ann. & Mag., viii, p. 243, 1861; x, 295, 1862. = Alaba. 282
Picta (Fossarina), A. Ad. Zool. Proc., p. 312, t. 19, f. 26, 1867, ... 275
Picta (Lacuna), Watson. Journ. Linn. Soc., xv, p. 96, 1881, . 270
Picta (Littorina), Phil. Abbild. Zool. Proc., p. 139, 1845.
= L. planaxis, Nutt. 248
Picta (Risella), Phil. Zeitsch. für Malak., p. 132, 1846.
= Risella melanostoma, Gmel. 262
Pigra (Planaxis), Forbes. Zool. Proc., 1850.
= P. mollis, Sowb. 279
Piligerum (Holcostoma), Phil. Zeitsch. für Malak., p. 164, 1848, ... 280
Pintado (Littorina), Wood. Suppl., t. 6, f. 34, 1828, . . 250
Pisum (Modulus), Beck,Mss. Mörch, Mal. Blatt., xxiii, p. 130, 1876, ... 262
Plana (Risella), Quoy. Voy. Astr., iii, p. 274, t. 62, f. 13, 14, 1832. = R. melanostoma, Gmel. 262
Planaxis (Buccinum), Wood. Index Test. Supp., p. 12, t. 4, f. 15a, 1828. = Planaxis planicostatus, Sowb. 277
Planaxis, Lam. Anim. sans Vert., vii, 50, 1822, . . 237, 276
Planaxis (Littorina), Nuttall. Phil. Abbild., t. 4, f. 16, 1847, 248
Planicostatus (Planaxis), Sowb. Tank. Cat. App., p. 13, 1825, 277
Plena (Littorina). Mus. Godef. Cat., v, p. 105 (not of Gould.) = T. granularis, Gray. 260
Plena (Littorina scutulata, var.), Gld. Bost. Proc., p. 53, 1846; p. 83, 1849, ... 250
Plesiotrochus, Fischer. Journ. de Conch., xxvi, p. 212, 1878, 232, 264.
Plicatula (Risella), Phil. Zeitsch. für Malak., p. 39, 1851.
= R. melanostoma, Gmel. 262
Pliciferus (Fossarus), A. Ad. Zool. Proc., p. 111, 1863, . . 273
Plumbeus (Planaxis), Pse. Zool. Proc., p. 244, 1861.
= Plabiosus, A. Ad. 279
Porcata (Littorina), Phil. Zool. Proc., p. 139, 1845, . . 242
Porrecta (Lacuna), Carp. Ann. & Mag., xiv, p. 428, 1864, . 265
Portlockia, de Koninck, 1881, ... 231
Præclara (Giraudia), Bourg. Not. Moll. Lac Tanganyika, p. 62, 1885, ... 285
Præusta (Alaba), Recluz. Adams. Ann. Mag. N. Hist., x, 295, 1862. = A. melanura, C. B. Ad. 281
Productus (Planaxis lineolatus, var.), Nevill. Hand List, p. 187, 1885, ... 278
Pseudolævis (Littorina Diemenensis, var.), Nevill. Hand List, p. 141, 1884. = L. Mauritiana, Lam. 247
Pulchella (Conradia), A. Ad. Ann. & Mag., viii, p. 307, 1861, 273

PAGE.

Pulchella (Littorina), C. B. Ad. Mss. Mus. Cuming.
= L. Adamsi, Rve. 255
Pulchella (Littorina), Dkr. Zeitsch. für Malac., p. 166, 1845.
= L. punctata, Gmel. var. 248
Pulchra (Alaba), A. Ad. Ann. & Mag., p. 296, 1862, . . 282
Pulchra (Littorina), Sowb. Genera, t. 2, f. 3, . . . 246
Pullata (Littorina), Carp. Ann. & Mag., xiii, p. 476, . . 250
Pumilio (Littorina), E. A. Smith. Philos. Trans. Roy. Soc., clxviii, 173, 1879, ... 267
Punctata (Diala), Tenison Woods. Roy. Soc. Tasm., p. 15, 1875. = D. lauta, A. Ad. 282
Punctata (Littorina angulifera, var.), Phil. Abbild., t. 5, f. 13, 1847. = L. lineata, Gmel. 243
Punctata (Littorina), Gmel. Syst. Nat., p. 3597, . . . 248
Punctata (Littorina intermedia, var.), Phil. Zool. Proc., p. 141, 1845, ... 244
Punctata (Littorina), Pfr. Archiv für Naturg., i, p. 255, 1840. = L. meleagris, Beck. 248
Punctata (Littorina scabra, var.), Phil. Abbild., t. 5, f. 5, 1847, ... 243
Punctata (Phasianella), Pfr. Wiegmann's Arch., i, 255, 1840, = Littorina guttata, Phil. 248
Punctiplicata (Littorina), Phil., t. 4, f. 15, 1847.
= L. aspera, Phil. var. 249
Puncto-striata (Alaba), Gld. Otia Conch., p. 144, . . 282
Punctostriatus (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 355, ... 279
Purpurina, d'Orb., 1850, ... 232
Purus (Fossarus), Cpr. Ann. & Mag., xiii, p. 477, 1864, . 274
Pusilla (Littorina), Phil. Abbild., t. 3, f. 23, 1846, . . 251
Pusillus (Fossarus), Gld. Boston Proc., iii, p. 193, . . 272
Puteolus (Lacuna), Turton. Dict., p. 193, ... 265
Pygmæa (Lævilitorina), Pfr. Natur. Mus. Hamburg, p. 86, t. 1, f. 11, 1886, ... 254
Pygmæum (Buccinum), Brug. Enc. Meth.
= Planaxis lineatus, DaCosta. 278
Pyramidalis (Littorina), Quoy. Voy. Astr., ii, p. 482, t. 33, f. 12–15, 1832. = L. nodulosa, Gmel. 258
Pyramidalis (Planaxis), Gmel. Syst. Nat., p. 3488.
= P. sulcatus, Born. 276
Pyrgula (Fossarus), A. Ad. Zool. Proc., p. 113, 1863, . . 274

Quadrasia, Crosse. Journ. de Conch., p. 159, 1886, . . 238
Quadrifasciata (Lacuna), Mont. Test. Brit., p. 328, t. 20, f. 7.
= L. divaricata, Fabr. var. 266
Quadriseriata (Littorina bullata, var.), Phil. Abbild., t. 2, 1846, ... 257
Quoyia, Desh. Enc. Meth., ii, 1830, ... 238

PAGE.
Radiata (Littorina), Souleyet. Voy. Bonite., ii, p. 562, t. 31, f. 46, 47. = T. granularis, Gray, 1852, ... 260
Raulinia, Mayer. Journ. de Conch., p. 180, 1864, . . 236, 274
Rectangulata (Alaba), Craven. Ann. Soc. Mal. Belg. Bull., xcvi, 1880, ... 282
Reflexa (Lacunella), Dall. Proc. U. S. Nat. Mus., vii, p. 344, t. 2, f. 1–3, 1884, ... 267
Reticulata (Littorina), Anton. Verzeich., p. 53, 1839. ? = T. miliaris, Quoy. 259
Reticulatus (Fossarus), A. Ad. Zool. Proc., p. 186, t. 20, f. 13, 1853. = F. insignis, Nevill. 273
Reticulatus (Fossarus), S. Wood. Crag Moll., i, p. 122, t. 12, f. 10, ... 272
Retusa (Monodonta), Brug. Encyc. Meth., t. 447, f. 4. = Modulus tectum, Gmel. 260
Retusus (Turbo), Lam. Anim. sans Vert., vii, p. 48. = Littorina obtusata, Linn. 253
Reymondia, Bourg. Notice L. Tanganyika, 64, 1885, . . 239
Rhabdopleura, de Koninck, 1881, ... 231
Riisei (Littorina), Mörch. Mal. Blatt., xxiii, p. 140, 1876. = L. ziczac, Chemn. 251
Risella, Gray. Syn. Brit. Mus., 1840, ... 232, 262
Roepstorffiana (Risella), Nevill. Hand List, p. 161, 1884, . 264
Rubra (Littorina), Anton. Verzeich., p. 53, 1839, . . . 260
Rubra (Littorina angulifera, var.), Phil. Abbild., t. 5, f. 12, 1847. = L. lineata, Gmel. 243
Rubra (Littorina scabra, var.), Phil. Abbild., ii, 222, 1847, . 243
Rudis (Littorina), Cooper. N. Pacific R. R. Survey, 374. = L. Sitchana, var. 241
Rudis (Littorina), Donov. Brit. Shells, i, p. 33, f. 3, . . 241
Rufa (Lacuna), Dorset. Catal., t. 14, f. 12. = L. puteolus, Turt. 265
Rufa (Littorina), Recluz. Reeve, Icon. Sp. 87, 1857, . . 247
Rufilabris (Diala), A. Ad. Ann. & Mag., p. 298, 1862, . . 284
Rugosa (Littorina), Menke. Moll. Nov. Hollandiæ, p. 9, 1843, ... 259
Rustica (Littorina bullata, var.), Phil. Abbild., t. 2, 1846, . 257

Savignyi (Litiopa), Issel. Mal. Mar Rosso., p. 197, 1869, . 281
Savignyi (Planaxis), Desh. Mag. Zool., t. 109, 1844. = P. sulcatus, Born. var. 277
Saxatilis (Littorina), Johnston. Berwick Club, i, p. 268. = L. rudis, Mtg. var. 242
Saxatilis (Littorina), Olivi. Zool. Adriat., 1789. = L. Neritoides, Linn. 252
Sayi (Littorina), Phil. Zool. Proc., p. 140, 1845. = L. columellaris, d'Orb. var. 246

PAGE.

Sayi (Littorina), Reeve. Conch. Icon., p. 96, a, b.
= L. irrorata, Say. var. 246
Sayi (Monodonta), Nuttall. A. Adams, Zool. Proc., 203, 1850.
= Modulus Carchedonicus, Lam. 261
Scabra (Littorina), Anton. Verz., p. 53, 1839.
= L. dilatata, d'Orb. 258
Scabra (Littorina). Linn. Syst. Nat., p. 1243, . . . 243
Scabra (Littorina), d'Orb. Moll. Cuba, p. 212, t. 15, f. 15–17.
= L. lineata, Gmel. 243
Scalata (Alaba), Carp. Mazatlan Shells, p. 368, . . . 282
Scutulata (Littorina), Gld. Bost. Proc., iii, p. 83, 1846, . 250
Semilævis (Planaxis), Martens. Conch. Mittheil., ii, p. 151, 1881, ... 280
Semistriata (Alaba), Philippi. Zeitschr. f. Mal., 1849, p. 34, . 282
Semisulcatus (Planaxis), Sowb. Genera of Shells, i, f. 3, 1824.
= P. nucleus, Lam. 277
Senegalensis (Alaba), Maltzan. Nachrichtsblatt, xvii, p. 28, . 282
Serialis (Littorina), Souleyet. Voy. Bonite., ii, p. 558, t. 31, f. 34–36, 1852. = L. pintado, Wood. var. 250
Setigerum (Holcostoma), A. Ad. Zool. Proc., p. 174, t. 20, f. 5, 1853. = H. piligerum, Phil. 280
Setosa (Littorina), E. A. Smith. Ann. & Mag., xvi, p. 69, 1875, ... 255
Sicula (Maravignia), Aradas. Atti Acad. Genova, xvii, 42, 1840. = Fossarus ambiguus, Linn. 271
Sieboldi (Littorina), Phil. Zool. Proc., p. 142, 1845.
= L. scabra, Linn. var. 244
Similis (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 41, 1872. = P. nigra, Quoy. 278
Simplex (Diala), E. A. Smith. Ann. & Mag., xvi, p. 105, 1875, ... 284
Simplex (Littorina), Reeve. Conch. Icon., f. 63, a, b, 1857.
= L. rudis, Mtg. 241
Simpsoni (Fossarina). Tenison Woods. Roy. Soc. Tasmania, p. 149, 1875. = F. Petterdi, Brazier. 275
Sinensis (Littorina), Phil. Abbild., iii, p. 52, t. 6, f. 23.
= L. intermedia, Phil. var. 244
Sismondi (Risella), Issel,Ms. Nevill, Hand List, 160.
? = R. infracostata, Issel. 264
Sitchana (Littorina), Phil. Zool. Proc., p. 140, 1845, . . 240
Solidula (Lacuna), Lovén. Index Moll. Scandin., p. 23.
= L. divaricata, Fabr. 266
Solutus (Fossarus), Nevill. Hand List, p. 167, 1884, . . 273
Souverbiana (Littorina), Crosse. Journ. de Conch., p. 53, t. 1, f. 6, 7, 1862. = L. brevicula, Phil. 241
Souverbianus (Plesiotrochus), Fischer. Journ. de Conch., xxvi, p. 212, 1878, ... 264

PAGE.
Spinulosa (Littorina), Phil. Abbild., iii, p. 17, f. 24, 1847.
= T. bullatus, Mart. var. 257
Spiratus (Fossarus), A. Ad. Zool. Proc., p. 113, 1863, . . 270
Spironema, Meek. Smithsonian Check List, Inv. foss., 35, 1864, ... 235
Squalida (Littorina), Brod. & Sowb. Zool. Journ., iv, p. 370, 240
St. Claræ (Alaba), Tenison Woods. Proc. Roy. Soc. Tasm., 184, 1876, ... 282
Stenotis, A. Ad. Ann. & Mag., xi, p. 351, 1863, . . 234, 268
Stolizkanus (Fossarus), Nevill. Journ. Asiat. Soc. Beng., Pt. 2, p. 4, 5, t. 1, f. 10, 1871. = F. costatus, Brocchi. . . 272
Striata (Alaba), Watson. Challenger Exped., xv, p. 569, t. 42, f. 6, 1886, ... 284
Striata (Litiopa), Pfr. Archiv für Naturg., i, p. 255, 1840.
= L. melanostoma, Rang. 281
Striata (Littorina), King. Zool. Journ., v, p. 345, . . . 247
Striata (Phasianella), Brown. Conch. Gt. Brit.
= Lacuna divaricata, Turt. 266
Striatula (Planaxis), Phil. Zeitsch. für Malak., p. 91, 1851.
= P. labiosus, A. Ad. var. 279
Striatulus (Fossarus), A. Ad. Zool. Proc., p. 111, 1863,. . 273
Strigata (Littorina), Lischke. Mal. Blatt., xviii, p. 148, 1871, 245
Strigata (Littorina angulifera, var.), Phil. Abbild., t. 5, f. 14, 1847. = L. lineata, Gmel. 243
Strigata (Littorina intermedia, var.), Phil. Zool. Proc., p. 141, 1845, ... 244
Strigatus (Planaxis), Hanley. Thes. Conch., 176, f. 24.
= P. lineatus, DaCosta. 279
Strigosum (Buccinum), Gmel. Syst. Nat., p. 3488.
= Planaxis lineatus, DaCosta. 278
Styliferinus (Fossarus), Nevill. Hand List, p. 167, 1884, . 273
Styliferina, A. Ad., ... 239, 284
Subangulata (Alaba), A. Ad. Ann. & Mag., x, p. 298, 1862, 282
Subcingulata (Littorina filosa, var.), Nevill. Hand List, p. 149, 1884, ... 244
Subgranosa (Melaraphe), Dkr. Zool.-Bot. Verein Vienna, xvi, p. 913, 1866. = T. granularis, Gray, var. 260
Subimbricata (Risella, Templiana, var.), Nevill. Hand List, 162, 1884, ... 264
Subinermis (Littorina bullata, var.), Phil. Abbild., t. 2, 1846, ... 257
Subinfracostata (Risella tantilla, var.), Nevill. Hand List, p. 160, 1884, ... 263
Subintermedia (Littorina conica, var.), Nevill. Hand List, p. 150, 1884. = L. undulata, Gray. 244
Subnigra (Planaxis Savignyi, var.), Nevill. Hand List, 185, 1885, ... 281

PAGE.
Subnodosa (Littorina), Phil. Abbild., ii, p. 19, t. 3, f. 8, 9.
= L. nodosa, Gray. 259
Subreticulatus (Fossarus), Nevill. Hand List, p. 168, 1884, . 273
Subtenebrosa (Littorina), Middendorff. Bull. St. Petersburg Acad., vii, No. 16. = L. Sitchana, Phil. var. . . . 241
Subtriangularis (Lacuna pallidula, var.), Kobelt. Faun. Europ., 171, ... 265
Succincta (Diala), A. Ad. Ann. & Mag., vi, p. 124, 1870, . 284
Succinctus (Planaxis), A. Ad. Zool. Proc., 1851.
= P. lineatus, DaCosta, var. 278
Succinea (Lacuna), Mörch. Mal. Blatt., vii, p. 70, 1861, . 270
Sulcata (Alaba), Watson. Challenger Rept., xv, p. 570, t. 42, f. 7, 1886, ... 284
Sulcata (Littorina), Menke. Synopsis. = L. obligata, Say. . 241
Sulcatus (Fossarus), d'Orb. Moll. Cuba, t. 17, f. 28.
= F. Orbignyi, Fischer. 271
Sulcatus (Fossarus), S. Wood. Crag Moll., i, 120, 1848, . 272
Sulcatus (Planaxis), Born. Mus. Vindobon, p. 258, t. 10, f. 5, 6, 276
Sulcifera (Diala), A. Ad. Ann. & Mag., x, p. 298, 1862, . 284
Sulciferus (Fossarus), A. Ad. Zool. Proc., p. 112, 1863, . 274
Sulculosa (Littorina), Phil. Zool. Proc., p. 142, 1845, . . 247
Supralirata (Alaba), Carp. Mazatlan Shells, p. 366, . . 282
Suturalis (Diala), A. Ad. Ann. & Mag., p. 298, 1862, . . 283
Suturalis (Littorina scabra, var.), Phil. Abbild., t. 5, f. 7, 1847, ... 243
Suturalis (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 43, 1872, ... 277
Syhadrensis (Cremnobates), Blanford. Ann. & Mag., xii, p. 184, t. 4, f. 1–7, 1863, ... 256
Syriaca (Littorina), Phil. Abbild., t. 3, f. 21, 22, 1846.
= L. punctata, Gmel. var. 248

Tæniatus (Planaxis), Phil. Zeitsch. für Malak., p. 165, 1848, 280
Tantilla (Risella), Gld. Bost. Proc., iii, p. 118, 1849, . . 263
Tasmanicus (Fossarus), Tenison Woods. Roy. Soc. Tasmania, p. 148, 1876, ... 274
Tectarius, Val. Zool. Voy. Humb., ii, 271, 1833, . . . 281
Tectiformis (Echinella), Watson. Journ. Linn. Soc., xv, p. 94, 1881, ... 258
Tectum (Modulus), Gmelin. Syst. Nat., 3569, 1791, . . 260
Tectum-Persicum (Littorina), Linn. Syst. Nat. Ed., xii, p. 1234, ... 257
Tectum-Persicum (Littorina), Weinkauff. Kuster's Conch. Cab., t. 5, f. 3, 4. = T. armatus, Fischer. 257
Temana (Leach), Gray. Ann. Mag. N. Hist., xx, 1847.
= Lacuna, Turton. 233
Templiana (Risella), Nevill. Hand List, 161, 1884, . . 264

PAGE.

Tenebrata (Littorina), Nuttall, Ms. Weink. Conch. Cab., p. 63, 1882. = L. pintado, Wood. 250
Tenebrosa (Littorina), Schrenk. Nord Japan, 321. = L. Sitchana, Phil. var. 241
Tenebrosus (Turbo), Mont. Test. Brit., ii, p. 303; Supp. Pl. 20, f. 4. = Littorina rudis, Maton. var. 242
Tenella (Hela), Jeffreys. B. C., v, p. 204, t. 101, f. 7, . . 268
Tenuis (Diala), E. A. Smith. Ann. & Mag., xvi, p. 105, 1875, 279
Tenuis (Littorina), Phil. Abbild.; Zool. Proc., p. 141, 1845, . 254
Tenuis (Littorina scabra, var.), Nevill. Hand List, p. 146, 1884, ... 243
Tenuis (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 45, 1872, ... 279
Terebralis (Alaba), Carp. Mazatlan Shells, p. 367. . . 282
Tervaricosa (Alaba), C. B. Ad. Contrib. Conch. . . . 281
Tessellata (Diala), Tenison Woods. Roy. Soc. Tasm., p. 15, 1875, ... 282
Tessellata (Littorina), Phil. Abbild., t. 5, f. 26, 1847, . . 250
Tessellata (Planaxis breviculus, var.), Nevill. Hand List, p. 186, 1885, ... 277
Thersites (Littorina), Rve. Conch. Icon., f. 78, 1857. = L. neritoides, Linn. 252
Thiarella (Littorina), Anton. Verz., p. 53, 1839. = L. dilatata, d'Orb. 258
Thomsoni (Limnotrochus), Smith. Ann. & Mag., vi, p. 425, 1880; Zool. Proc., p. 285, t. 33, f. 17, 17b, 1881, . . . 264
Thorpeana (Lacuna), Phil. Kust. Conch. Cab., p. 48, t. 6, f. 14, 1853. = L. pallidula, var. 265
Tigrina (Littorina), C. B. Ad. Mörch, Mal. Blatt., xxiii, 137, = L. tessellata, Phil. 251
Tigrina (Littorina), d'Orb. Moll. Cuba, p. 211, t. 15, f. 9–11, 1853. = L. nebulosa, Lam. 244, 251
Tornata (Couradia), A. Ad. Zool. Proc., p. 112, 1863, . . 273
Tornatilis (Fossarus), Gould. Bost. Proc., vii, p. 44, 1861. = F. costatus, Brocc. 272
Tricolor (Turbo), Risso. Eur. Merid., t. 4, p. 116. = Littorina neritoides, Linn. 252
Trochiformis (Littorina), Phil. (not Dillw.). Abbild., ii, t. 2, f. 12–15. = T. dilatatus, Orb. 258
Trochiformis (Modulus), Eyd. & Soul. Voy. Bonite, Zool., t. 37, f. 25–31. = M. catenulatus, Phil. 261
Trochiformis (Turbo), Dillw. (not Phil.). Cat., ii, p. 826. = Littorina nodulosa, Gmel. 258
Trochlearis (Fossarus), A. Ad. Zool. Proc., p. 187, 1853, . 274
Trochoides (Littorina), Gray. Zool. of Beechey's Voy., p. 140, 1839. = L. nodulosa, Gmel. 258
Tuba, Lea. Contrib. Geol., 127, 1833, ... 236

PAGE,

Tuberatus (Iphitus), Jeffreys. Zool. Proc., p. 114, t. 20, f. 12, 1883, ... 274
Tuberculata (Littorina), Menke. Cat. Malsb., p. 10. = L. dilatata, d'Orb. 258
Tuberculatus (Iphitus), Watson. Challenger Exped., xv, p. 583, t. 46, f. 5, 1886, ... 275
Tuberculatus (Turbo), Gray. Wood, Ind. Test. Supp., p. 19, 57, t. 6, f. 30, 1828. = T. dilatatus, Orb. 258
Tuberia, Carp. Mazat. Cat., 365, 1857. = Alaba, H. & A. Ad. 238
Tuberosus (Fossarus), Carp. Mazatlan Shells, p. 354, . . 274
Tumida (Diala), Tenison Woods. Roy. Soc. Tasmania, p. 15, 1875, ... 283
Turneri (Aquilonaria), Dall. Proc. U. S. Nat. Mus., vi, p. 204, t. 3, f. 1–3, 1886, ... 255
Turrita (Lacuna), A. Ad. Ann. & Mag., viii, p. 305, 1861, . 270

Umbilicata (Lævilitorina), Pfr. Natur. Mus. Hamburg, p. 88, t. 1, f. 12, 1886, ... 254
Umbilicata (Littorina), d'Orb. Voy. Amer. Merid., p. 394, t. 76, f. 1–3, 1843, ... 253
Undulata (Littorina), d'Orb. (not Gray.) Moll. Cuba, p. 212, t. 15, f. 12–14, 1853. = L. tessellata, Phil. . . . 251
Undulata (Littorina), Gray. Zool. of Beechey's Voy., p. 140, 1839, ... 244
Undulata (Planaxis), Lam. Anim. sans Vert., x, p. 236. = P. sulcatus, Born. 276
Unicarinata (Lacuna), E. A. Smith. Ann. & Mag., xvi, p. 104, 1875, ... 270
Unifasciata (Lacuna), Carp. Zool. Proc., 205, 1856. = L. divaricata, Fabr. 267
Unifasciata (Littorina), Gray, in King's Survey, p. 483. = L. Mauritiana, Lam. 247
Unidens (Modulus), Lister (Chemn. Conch. Cab., x, p. 290, 1788), Auct. 261
Ustulatus (Littorina), Blainv. = L. obtusata, Linn. . . 253
Ustulatus (Turbo), Lam. Anim. sans Vert., ix, 199. = Littorina littorea, Linn. 240

Varia (Adeorbis), Hutton. Cat. Moll. N. Zeal., 1873, . 255, 276
Varia (Diala), A. Ad. Ann. & Mag., viii, p. 243, 1861. = L. semistriata, Phil. 282
Varia (Littorina), Sowb. Genera of Shells, No. 37, 1824, . 246
Variabilis (Planaxis), E. A. Smith. Ann. & Mag., ix, p. 44, 1872. = P. lineatus, DaCosta. 278
Variegata (Lacuna), Carp. Ann. & Mag., xiv, p. 428, 1864, . 266
Variegata (Littorina), Souleyet. Voy. Bonite., ii, p. 560, t. 31, f. 40–42, 1852. = L. varia, Sowb. 246

PAGE
Variegatus (Fossar), A. Ad. Zool. Proc., p. 187, 1853, . . 276
Varius (Littorina), Hutton. Man. Moll. N. Zeal., p. 35, 1873, 255
Ventricosa (Littorina), Phil. Abbild., iii, 15, t. vi, f. 19.
= L. granularis, Gray. 242
Ventricosa (Littorina scabra, var.), Phil. Abbild., t. 5, f. 8, 1847, ... 243
Ventrosa (Litiopa), A. Ad. Ann. & Mag., viii, p. 404, 1861, 281
Ventrosa (Litiopa), Pfr. Archiv für Naturg., i, p. 255, 1840, 281
Venusta (Lævilitorina), Pfr. Natur. Mus. Hamburg, p. 85, t. 1, f. 9, a, b, 1886, ... 254
Vera (Littorina bullata, var.), Phil. Abbild., t. 2, 1846, . 257
Vestita (Lacuna), Dkr. & Metz. Nordsee Exped., p. 256, . 270
Vestitus (Planaxis), Dkr. In collection. Donum. Bism., 41.
= P. labiosus, A. Ad. 279
Vestitus (Turbo), Say. Journ. Phila. Acad., ii, p. 241.
= L. tenebrosa, Montg. 242
Vibex (Alaba), A. Ad. Ann. & Mag., x, p. 296, 1862, . . 282
Vidua (Littorina), Gould. Bost. Proc., vii, p. 138, 1861, . 255
Vilis (Littorina), Menke. Phil. Abbild., ii, p. 15, t. 2, f. 21.
L. nodulosa, Gmel. 258
Vincta (Lacuna), Mont. Test. Brit., p. 307, t. 20, f. 3, 1803.
= L. divaricata, Fabr. 266
Violacea (Alaba), Carp. Mazatlan Shells, p. 367, . . . 282
Virgatus (Planaxis), Smith. Ann. & Mag., ix, p. 44, 1872.
= P. lineatus, DaCosta. 279
Vitiensis (Littorina), Dkr. Mal. Blatt., xviii, p. 150, 1871.
= T. granularis, Gray. 260
Vittata (Littorina), Phil. Abbild., iii, p. 58, t. 7, f. 11, 1848.
= L. obtusata, Linn. var. 253
Vittata (Risella), Phil. Zeitsch. für Malak., p. 131, 1846.
= R. melanostoma, Gmel. 262
Vulgaris (Littorina), Sowb. Genera of Shells, No. 37, f. 1.
= Turbo littoreus, Linn. 240

Wood–Masoniana (Alaba), Nevill. Hand List, p. 182, 1885, 282

Zebra (Buccinum), Meg. Berl. Schrift., viii, t. 1, f. 7, 1811.
= Planaxis lineatus, DaCosta. 278
Zebra (Littorina), Wood. Suppl., t. 6, f. 33, 1818.
= L. Peruviana, Lam. 249
Zebrina (Diala), A. Ad. Ann. & Mag., x, p. 296, 1862.
= Alaba. 282
Ziczac (Littorina). Chemn. Conch. Cab., v, p. 69, f. 1599, 1560, ... 251
Zonaria (Littorina), Bean. = L. Rudis, Donov. . . . 241
Zonatus (Planaxis), A. Ad. Zool. Proc., p. 271, 1851.
= P. lineatus, DaCosta. 279

Monograph of the Families Rissoiidæ, Jeffreysiidæ, Skeneidæ, Choristidæ and Homalogyridæ.

Family *RISSOIIDÆ.*

Animal with a more or less elongated muzzle; elongated, cylindrical tentacles, with the eyes on swellings at their outer bases; verge (male organ) exserted, situated at a considerable distance behind the right tentacle; gills both pallial, the right one largest, rather short and broad, composed of few laminæ, which are much broader than high; foot oblong, punctate before, rounded or pointed behind; operculigerous lobe well developed. Operculum corneous, paucispiral. Dentition (Pl. 54, fig. 98.)

Shell small, usually turbinate or elongate, often more or less umbilicated; peristome continuous, more or less rounded, never truly channeled in front.

The Rissoiidæ are small, often minute, phytophagous marine mollusks, inhabiting all parts of the world, frequenting algæ, zostera, etc., from which they often suspend themselves by a mucous filament.

Formerly a large number of fresh and brackish-water forms were here included, which, although nearly allied both as to animal and shell, are now perhaps more properly considered to form a family apart—Hydrobiidæ: these will be considered in the series of the Manual devoted to Fresh Water Mollusks.

The Rissoiidæ have been monographed by: Schwartz von Mohrenstern, Denkschriften K. Akad. Wissen, 1860–64.

Sowerby, in Reeve's Conchologia Iconica, xx, 123, sp. No date.

Weinkauff, in Küster's Conch. Cab., 273 species, 1876.

Synopsis of Genera and Subordinate Groups.

Genus RISSOIA, Frémenville. 1814.

Shell imperforate or subperforate, more or less oblong, turbinated, usually thick, white or corneous, smooth, ribbed or cancellated, aperture entire, oval, peristome thick, simple or reflected. Operculum corneous, paucispiral (Pl. 54, fig. 95).

The animal has long, slender tentacles, sometimes ciliated, with eyes on small prominences near their outer bases; mantle with a tentacular appendage in front, on the right side, or on either side; foot truncate in front, attenuated behind, with a glandular sulcus

on its lower side; operculigerous lobe with a wing-like expansion on either side, with one to three posterior filaments. Jaws oval, lingual teeth 2-1-1-1-2 (Pl. 54, fig. 98).

Fully 200 recognized species have been made known to science, besides unfigured species and synonyms amounting to perhaps 400 more. From their minute size it is probable that many more remain to be described. They inhabit all seas, from high water to 100 fathoms, but being phytophagous, abound most in shallow water, near shore, on beds of seaweed.

There are a few secondary species, but Rissoia is principally found fossil in tertiary beds.

Rissoia is active and bold, floats like its congeners, and spins a byssal thread instantly upon being detached from its foothold. The incessant play of the tentacular ciliæ is very striking. The pallial filaments probably are, like the tentacles, tactile in function.

Subgenus Rissoia (sensu stricto).

Shell elongated conic, longitudinally costate; aperture oblong, with a thickened peristome bearing an exterior rib.

R. VENTRICOSA, Desmarest.

The characters of the following subordinate groups so merge one into another that in many cases the relegation of species to a particular division is an entirely arbitrary matter. I shall indicate the sections; but it must be understood that many of the species have not been assigned heretofore to any section, and that others belong to two or more sections, according to the variation of their characters. No doubt the institution of divisions founded upon such unsubstantial characters has tended to the undue multiplication of species; but I am unable to satisfactorily arrange the synonymy—this can only be done by one who will devote himself to the subject, as a specialty.

Section APICULARIA, Monterosato. 1884.

Shell turbinate, whorls and aperture more rounded, the interstices of the rounded ribs spirally striate. R. EHRENBERGI, Phil.

Section RISSOSTOMIA, Sars. 1878.

Shell very thin, smooth or slightly longitudinally costate, often with zigzag longitudinal fulvous markings.

R. MEMBRANACEA, Adams.

Section PERSEPHONA (Leach, 1852), Monts 1884.

Originally included a heterogeneous assemblage of species of various types. Monterosato has recently restricted it to those having punctate spiral lines; either longitudinally ribbed or smooth.

R. RUFILABRIS, Leach.

This group shades unmistakably into the typical one.

Section SCHWARTZIA, Bucq. Dautz. et Dollf. 1884.

Shell elongated, conic, longitudinally ribbed or smooth, columella dentate. R. MONODONTA, Bivona.

Section ZIPPORA, Leach. 1847.

Clausilia-like, generally elate, smoothish or longitudinally ribbed; margin of aperture dilated or reflected.

Acme, H. & A. Adams, is a synonym. R. AURISCALPIUM, Linn.

Section TURBELLA, Leach. 1847.

Shell ovate, minute, often flamed or maculate with chestnut, with rounded longitudinal ribs, becoming obsolete on lower part of body whorl, or sometimes smooth, no spiral striæ. R. PARVA, DaCosta.

Pusillina, Monts., 1884, may be united with this section. Whorls turriculated, ribs interrupted, lip acute, not externally varicose. *R. pusilla*, Phil.

? Section MOHRENSTERNIA, Stoliczka. 1868.

Turriculated, thin, semipellucid; whorls frequently transversely costulate; columella fissured at the base; aperture subovate, angulated behind, rounded in front, margin very little dilated, outer lip simple, scarcely varicose. Fossil in brackish or fresh-water deposits, R. INFLATA, Andrzejowski. *Eastern Europe.*

Section MANZONIA, Brusina. 1870.

Shell more or less shouldered, longitudinally ribbed, spirally ridged, peristome duplicate. *European.* R. COSTATA, Ads.

Flemingia, Jeffreys, 1884, is a synonym.

Section FOLINIA, Crosse. 1868.

Turriculated, longitudinally ribbed, spirally striate, posterior end of aperture with a small sinus. R. INSIGNIS, Folin. *Panama.*

Subgenus SABANÆA, Leach. 1847.

Shell smooth, stout, elevated conic, peristome thick, continuous.

R. FLAMMEA, Frauenf.

Section CORENA, A. Adams. 1870.

Elately turbinate, with obtuse apex, rimate; aperture circular, peristome duplicate, continuous, outer lip externally reflected, inner lip with thin, callous expansion and posterior tubercle.

R. TUBERCULIFERA, A. Ad. *Gulf of Suez.*

Section AMPHITHALAMUS, Carpenter. 1865.

Shell smooth, pupoidal, with large nucleus; peristome duplicated, the inner lip produced forward, with a subbasal space behind it, outer lip joining it posteriorily, suddenly contracted in the adult. *California, Australia, Japan.* R. INCLUSA, Carp.

Serobs, Watson, 1886, is a synonym.

Section NODULUS, Monts. 1878.

Shell subcylindrical, with obtuse spire, whorls smooth or feebly spirally striate; aperture rounded, peristome thick, continuous.

R. CONTORTA, Jeffreys.

Peringiella and *Pisinna*, Monts, 1878, may be united with this group.

Section ANABATHRON, Frauenfeld. 1867.

Shell scalariform, with a carinated shoulder, imperforate, smooth; aperture rounded, peristome continuous. R. CONTABULATA, Frauenf.

Section PELECYDIUM, Fischer. 1872.

Imperforate, elongate, subarcuated, finely striate; whorls somewhat flattened, apex mamillate; last whorl small, descending, deviating; aperture semicircular, exserted, entire, peristome continuous, somewhat thickened. R. VENUSTULA, Fischer.

Section HEMISTOMIA, Crosse, 1872.

Imperforate, elongated, thin, smooth, olivaceous corneous, under a persistent thin epidermis, apex mamillate, obtuse; aperture a little solute, peristome continuous.

New Caledonia. R. CALEDONICA, Crosse.

The characters of this group correspond mainly with those of the preceding one, but the corneous texture and brackish water habitat, have led Dr. Fischer to place it in the Hydrobiidæ. If it should prove identical with Pelecydium, the latter name will become a synonym. The operculum of Hemistomia is unknown.

Subgenus CINGULA, Fleming. 1828.

Shell thin, smooth or spirally striated, spotted or banded near the suture, outer lip sharp, or slightly thickened.

R. CINGILLUS, Montg.

Cingilla, Monts. 1884, is a synonym.

Section CINGULA (restricted.)

Shell elongated, with subacute spire, whorls flatly convex.

Section ONOBA, H. & A. Adams. 1854.

Turbiniform or somewhat elongated, whorls convex, conspicuously spirally striated, sometimes with short longitudinal plicæ at the suture; aperture oval, peristome continuous, thin or slightly thickened. R. STRIATA, Mtg.

Section CERATIA, H. & A. Adams. 1854.

Subcylindrical, thin, whorls flatly convex, with obtuse apex: outer lip thin and sharp.

Animal with flattened, mostly short and claviform tentacles, foot bifurcate behind. R. PROXIMA, Alder.

Section HYALA, H. & A. Adams. 1854.

Shell elevated conic, thin, hyaline, smooth or spirally striate; aperture oval, slightly emarginate anteriorily, outer lip thin, simple. Operculum subspiral.

Tentacles with setaceous summits. R. VITREA, Forbes & Hanley.

Section PLAGIOSTYLA, Fischer. 1872.

Smooth, transparent, apex papillary, last whorl descending; aperture semilunar, pillar lip oblique, rectilinear, outer lip not varicose.

R. ASTURIANA, Fischer.

Section SETIA, H. & A. Adams. 1854.

Whorls few, smooth, ventricose, spotted, spire short, with obtuse apex, aperture suborbicular. Animal with pilose tentacles.

R. PULCHERRIMA, Jeffreys.

Subsection MICROSETIA, Monts. 1884.

Imperforate or rimate, minute, brightly colored, often fasciate, smooth.

Pseudosetia, Monts. is a synonym. R. TURGIDA, Phil

Subsection CINGULINA, Monts. 1884.

Obtuse or globular, unicolored, lip thickened, covering the umbilicus. R. ALDERI, Jeffreys.

Subsection PARVISETIA, Monts. 1884.

Imperforate, spire rather short, apex obtuse, aperture expanded, semilunar, lip thickened. R. SCILLÆ, Seguenza.

Subgenus RISSOPSIS, Garrett. 1873.

Thin, elongated, cylindrical, apex truncate; aperture subovate, angular above, entire, peristome rather thin, somewhat expanded, columella oblique, arched. R. TYPICA, Garrett.

Subgenus ALVANIA, Risso. 1826.

Shell oval, turbiniform, spire short, with sharp apex, whorls rounded, nodulously cancellated, aperture subcircular, crenulated or grooved within, outer lip margined exteriorly by a varix.

Acinus, Monts, 1884, is a synonym. R. CIMEX, Linn.

Section ACINOPSIS, Monterosato. 1884.

Aperture subcanaliculate anteriorily, columella tuberculate below R. CANCELLATA, DaCosta.

Section NEVILLIA, A. Adams. 1868.

Imperforate, acutely ovate, whorls convex, spirally lirate, longitudinally striate; columella callous, toothed below, outer lip smooth or toothed within, varicose exteriorly. R. PICTA, A. Ad.

Section ALVINIA, Monts. 1884.

Whorls shouldered, spiral sculpture stronger than the longitudinal ribs. R. WEINKAUFFI, Schwartz.

Galeodina, Monts. 1884 (*R. carinata*, DaCosta), is a synonym.

Section THAPSIELLA, Fischer. 1884.

Elongated conic, whorls flatly convex, cancellated by close, small riblets and spiral lines, lip thin. R. RUDIS, Phil.

It is *Thapsia*, Monts. 1884, not Albers. 1860.

Section MASSOTIA, Bucq. Dautz. et Dollf., 1884.

Shortly oval, last whorl swollen, aperture large, surface feebly reticulated. R. LACTEA, Michaud.

Section ACTONIA, Monts. 1884.

Lip inferiorly, obliquely expanded, externally thickened; turbinately elongated, decussed by close riblets and spiral striæ.

R. ABYSSICOLA, Forbes.

Genus RISSOINA, d'Orbigny. 1840.

Rissoiform, ribbed or cancellated, whorls numerous, apex mamillated; aperture semilunar, lip thickened within, a little reflected.

anteriorly effuse or faintly channeled. Operculum corneous, thick, semilunar, paucispiral, with a claviform process on the internal face. (Pl. 54, figs. 93, 94.)

The form of the operculum, and effuse character of the base of the aperture are distinguishing features of this group. The species inhabit warm and temperate seas, are world-wide in distribution, and over 100 good species have been characterized. There are some secondary and tertiary species.

Section RISSOINA (typical).

Longitudinally costate, with or without spiral striæ, aperture produced below, without funicular rib on the base. R. INCA, Orb.

Section RISSOLINA, Gould. 1861.

With funicular rib below. R. ELEGANTISSIMA, Orb.

Section MICROSTELMA, A. Ads. 1863.

Turreted, ovate, rimate, spire conic, whorls longitudinally plicate; aperture oblong, produced anteriorly, subcanaliculate, inner lip thickened, outer lip simple. R. DÆDALA, A. Ad. *Japan.*

Section SCHWARTZIELLA, Nevill. 1884.

Aperture without basal emargination. R. BRYEREA, Mtg.

Section PHOSINELLA, Mörch. 1876.

Shell reticulated by subequal sculpture; aperture profoundly sinuated below. Operculum denticulate posteriorily.

R. SAGRAIANA, d'Orb.

Section ZEBINELLA, Mörch. 1876.

Shell very finely longitudinally costellate and spirally striate; aperture widened and emarginate below. R. RETICULATA, Sowb.

Section MORCHIELLA, Nevill. 1884.

Upper part of shell longitudinally ribbed, lower part smooth, or spirally striate. R. GIGANTEA, Desh.

Section ZEBINA, H. & A. Adams. 1854.

Shell white, solid, opaque, polished, smooth or partly striate; outer lip rather thick, often with one or more anterior internal tubercles. R. BROWNIANA, d'Orb.

Section PYRAMIDELLOIDES, Nevill. 1884.

Narrowly turreted, with spiral ribs, tuberculated below the suture.

R. INSOLITA, Desh.

Section STOSSICHIA, Brusina. 1879.

Embryonal shell sinistral; whorls cancellated; aperture canaliculated in front, lip varicose, dentate within, axis subperforate.

R. MIRABILIS, Dunker; R. PLANAXOIDES, Desm. Miocene of *Aquitaine*.

The group was proposed first for fossil species, but the above recent shell, referred by Semper to a new group *Isselia* (preoccupied, and by Nevill to *Isseliella*, 1885, may be included.

Subgenus EATONIELLA, Dall. 1876.

Smooth, aperture subcircular, peristome simple, continuous, not effuse below, lip margin not thickened. Operculum paucispiral, with an interior claviform process. R. KERGUELENENSIS, Smith. 3 sp. *Kerguelen Is.*

Name substituted for *Eatonia*, E. A. Smith, preoccupied.

Genus BARLEEIA, Clark. 1855.

Conically turbinated, whorls slightly convex, smooth; aperture oval, entire, rounded in front, lip sharp. Operculum subconcentric, not spiral, with lateral nucleus, and an internal rib-like processs.

Operculigerous lobe without processes, tentacles moderate, simple, obtuse at their extremity, foot a little emarginate behind, truncate in front. B. RUBRA, Adams. *Europe.*

Many conchologists place this group in connection with Jeffreysiidæ, rather than with Rissoiidæ.

Genus KEILOSTOMA, Desh. 1848.

Elongated, turriculate, usually spirally striate; aperture short, entire, twisted at the base, angular behind, lip very thick, exteriorly varicose, laterally produced, sinuous behind.

Cretaceous and Eocene; *Europe*, *India*. K. EXIMIA, Desh. (Struct. & Syst. Conch., t. 72, f. 39.)

On account of *Chilostoma*, Fitz., 1833, Bayan, in 1873, changed the above name to *Paryphostoma*.

Genus FAIRBANKIA, Blanford. 1868.

Shell imperforate, turreted, with a brown epidermis; aperture suboval, rounded in front, lip slightly dilated, with acute margin and exterior varix. Operculum corneous, subannular, with an interior long transverse rib.

Animal with long filiform tentacles, and eyes sessile at their bases; proboscis elongated; foot wide, sinuated in front, rounded behind. F. BOMBAYANA, Blanf. Estuary; *Bombay Harbor.*

Combines the epidermis, and to a great extent the animal of Hydrobia, with the peristome of Rissoia and the operculum of Jeffreysia.

Genus IRAVADIA, Blanford. 1867.

Rissoiform, the apex often obtuse, whorls spirally ribbed and covered with an epidermis; aperture ovate, margins continuous, anteriorly slightly effuse, outer lip with an external varix. Operculum and animal unknown.

Brackish water. *India.* I. ORNATA, Blanford.

Probably closely related to Fairbankia.

Genus FENELLA, A. Adams. 1871.

Shell turriculate, subulate, or pupoid, whorls cancellated; aperture oval in front, peristome interrupted, lip sharp, thickened or varicose. F. PUPOIDES, A. Ad. *Japan.*

Some authors place Fenella in Pyramidellidæ.

Genus PUTILLA, A. Ad. 1867.

Shell turbinated-conic, solid, smooth, rimate; aperture suborbicular, lip thickened, subeffuse in front, scarcely expanded. Relationships obscure. P. LUCIDA, A. Adams. *Japan.*

Genus SKENELLA, Pfeffer, 1886.

Shell depressed globose, compressed around the umbilicus; peristome continuous, the inner lip straight, oblique; operculum paucispiral, with a projecting lamina, arising from the nucleus.

S. GEORGIANA, Pfeffer.
South Georgia.

FAMILY *JEFFREYSIIDÆ.*

Proboscis bilobed in front, forming two sharp, narrow, ciliated appendages as long as the tentacles, which are equally ciliated; eyes sessile at the base of the tentacles; foot lanceolate. Jaws scaly (Pl. 54, fig. 2). Radula variable, short, the central tooth small, with slightly reflected margin, lateral tooth arcuate, sometimes denticulate, sometimes unarmed, marginal teeth absent or present (Pl. 54, fig. 1).

Shell small, thin, transparent, with oval aperture. Operculum imbricated, concentric, with marginal nucleus, the inner face with a transverse carina (Pl. 54, figs. 96, 97).

Genus JEFFREYSIA, Alder. 1849.

Characters those of the family. Distr. *Europe, Japan.*

J. DIAPHANA, Alder.

Jeffreysia lives on algæ, from which it can suspend itself by a mucous thread. The eyes are visible through the shell.

Rissoella, Gray, 1847 (not described), is a synonym.

Subgenus TATEA, Tenison Woods. 1879.

Shell elongate pyramidal. Operculum calcareous, with a vertical, submarginal claw. Animal with truncate foot and long tentacles. T. HUONENSIS, Woods. *Tasmania.*

Subgenus DARDANIA, Hutton. 1882.

Shell ovate, subconical, smooth, imperforate, olivaceous; aperture oval, entire, rounded in front; peritreme not continuous, outer lip thin. Operculum like Jeffreysia. D. OLIVACEA, Hutton.

New Zealand.

FAMILY *SKENEIDÆ.*

Head large, proboscidiform, foot truncate in front, operculigerous lobe without appendages, tentacles long, cylindrical, eyes nearly sessile, at their external base (Pl. 54, fig. 100). Jaws tuberculate. Radula like Hydrobia (Pl. 54, fig. 99).

Shell depressed, nearly discoidal, few-whorled, widely umbilicated, aperture rounded, peristome continuous. Operculum corneous, multispiral.

Genus SKENEA, Fleming. 1828.

Characters those of the family. *Northern Seas.* Low water, under stones and on algæ. S. PLANORBIS, Fabr.

Delphinoidea, Brown, is a synonym.

FAMILY *CHORISTIDÆ.*

Shell helieiform, thin, perforate, covered by an epidermis; aperture oval, peristome continuous, sharp. Operculum corneous, spiral.

Head short, large, two short anterior tentacles are connected by a frontal veil, the posterior tentacles are simple, thick, conical; no eyes; proboscis retractile; foot large, oval, with two anterior ten-

tacular processes; a papilla on either side between the mantle and foot, and two posterior threads below the operculum. Jaws elliptic. Radula with three rachial teeth, of which the middle is very small, the others unicuspid, lateral tooth large, bicuspid, marginal small, curved, simple, a small basal plate exterior to them (Pl. 54, fig. 5).

Genus CHORISTES, Carpenter. 1872.

The characters are those of the family, the systematic position of which is very uncertain. Verrill is inclined to place it among the tectibranchs, near Actæon, but the shell and appendages of the epipodium recall Rissoid characteristics.

C. ELEGANS, Carp., described from Canadian post-pliocene fossils, has been found living on the New England coast, within the egg capsule of a ray.

Family *HOMALOGYRIDÆ.*

Body flattened, ciliated in front, no tentacles, eyes sessile (Pl. 54, fig. 3). Radula narrow, the central tooth having a quadrangular base with large cusp, imbricated, one series on the other, a lateral, transverse plate replaces the lateral and marginal teeth. (Pl. 54, fig. 4.)

Shell planorbiform, spire involute, mouth clasping both sides of the periphery. Operculum corneous, few-whorled, nucleus central.

Genus HOMALOGYRA, Jeffreys. 1867.

Characters those of the family. H. NITIDISSIMA, Forbes & Hanley. *Europe, Greenland.*

The external characters of the animal and its dentition are peculiar, and its systematic position is uncertain.

Omalogyra, Jeffreys, and *Ammonicerina*, Costa, are synonyms.

Family *RISSOIDÆ*.

Genus RISSOIA, Frémenville, 1814.

R. VENTRICOSA, Desm. Pl. 61, fig. 15.

Whitish or flesh color, with about 12 longitudinal costæ, fading on the upper part of the body whorl, finely spirally striate, lip pale violaceous or reddish, with external varix. Length, 8 mill.

Mediterranean Sea.

R. subventricosa, Cantraine, is a synonym.

R. SPLENDIDA, Eichw. Pl. 61, fig. 16.

Scarcely pellucid, polished, white, with faint spiral series of minute chestnut punctations, often obsolete, apex and peristome violaceous, ribs about 14, rarely spirally striate. Length, 5·4 mill.

Mediterranean Sea.

The synonyms are *R. violæstoma*, Kryn., and *R. ornata*, Phil.

This species, the preceding and the next, run together in such manner that it is very difficult to distinguish them; indeed, it is very doubtful whether they are specifically distinct.

R. PLICATULA, Risso. Pl. 63, fig. 56.

Whorls rapidly increasing, flattened, with 12–14 slightly oblique, longitudinal ribs, vanishing on the lower part of the body whorl; lip strongly varicose; yellowish white, with fulvous flames between the ribs. Length, 6·3 mill.

Mediterranean Sea.

R. VARIABILIS, Muhlf. Pl. 61, figs. 16, 17; Pl. 65, fig. 4.

Whorls 7–9, convex, subangulated, with 10–12 longitudinal costæ, and punctate, spiral, impressed lines; lip externally varicose; whitish, or light brownish, with obscure, punctate, spiral, chestnut lines, and sometimes an obscure basal band, peristome violaceous.

Length, 9 mill.

Mediterranean Sea.

It is *R. costata*, Desm., *R. costulata*, Risso, *R. Desmaresti*, Recluz, *R. splendida*, Sowb., *Turbo Rissoanus*, Chiaje, *R. nodulifera*, and *R. punctata*, Küster, *R. protensa* and *R. neglecta*, Locard.

? Monstr. STRANGULATA, Brusina. Pl. 65, fig. 4.

Upper portion smooth, middle longitudinally costate, body whorl tumid, smooth, suture deep; vitreous white, peristome violaceous.

Length, 4·5 mill.

Dalmatia.

Monterosato considers this a monstrosity of *R. variabilis*.

R. DECORATA, Phil. Pl. 62, figs. 30, 31.

Rather solid, shining, scarcely pellucid, vitreous white, apex violaceous, with longitudinal chestnut lines between the ribs, sometimes tessellated with chestnut; longitudinal ribs 12, thick, spiral striæ close, densely punctate; aperture chestnut-violaceous, with a white exterior varix. Length, 5 mill.

Mediterranean Sea.

The synonyms are *R. pulchella*, Danilo and Sandri, *R. Lanzai*, Dunker, and var. *lineolata*, Brusina.

R. FRAUENFELDIANA, Brusina. Pl. 66, fig. 37.

Solid, turreted, with very convex, subangulated whorls and deep suture, with strong, rounded, elevated ribs, fading below the middle of the body whorl, crossed by close striæ; lip varicose, produced; color vitreous white, peristome violaceous, varix white.

Length, 5 mill.

Dalmatia.

More narrowly elongated, with more numerous whorls and more elevated ribs than the preceding species.

R. nodosa, Brusina, is a synonym.

R. GUERINI, Recluz. Pl. 62, figs. 36, 34, 35.

With about 10 thick, rounded, longitudinal ribs, and punctate spiral striæ, last whorl subinflated, usually smooth; lip varicose externally; brownish, with close, zigzag, longitudinal chestnut lines. Length, 5·8 mill.

Europe.

R. speciosa, Brusina, is a synonym.

Var. COSTULATA, Alder. Figs. 34, 35.

Narrower, yellowish, apex and aperture violaceous.

R. subcostulata, Schwartz, is a synonym.

R. AURANTIACA, Watson. Pl. 65, fig. 5.

Subopaque, subgradate, with deep suture; ribs 18–20, double the width of the interstices, fading out towards the base, with a dozen rounded spiral liræ, sometimes a little nodulous above; lip thin, thickened externally; orange color, whitish towards the aperture.

Length, 3 mill.

Canary Is.

R. MELANOSTOMA, Requien, and var. AMPHORULA, Brugn. (unfigured.)

Mediterranean.

R. SALEBROSA, Frauenf. Pl. 66, fig. 44.

Thick, somewhat shining, brownish, depressed conical, with 10–12 strong, close, rounded ribs, submodose at the suture, and on the angulated periphery of the last whorl; whorls 5½, flattened, rapidly increasing. Length, 2·6 mill.

Sydney, Australia.

Section APICULARIA, Monts. 1884.

R. SIMILIS, Scacchi. Pl. 61, fig. 29.

Thin, pellucid, vitreous, whorls rounded, with 10–14 longitudinal ribs, vanishing about the middle of the body whorl, with punctate, impressed spiral striæ; aperture small, produced in front, lip rarely thickened externally; white, peristome violaceous.

Length, 5 mill.

Mediterranean Sea.

R. arata, Risso, *R. ovatella*, Forbes, *R. rubrocincta*, and *R. apiculata*, Danilo and Sandri and vars. *apicina*, *striata*, *decurtata*, and *lævis*, Monts., are synonyms.

R. gemmula, Fischer, is probably a juvenile of this species.

R. EHRENBERGI, Phil. Pl. 61, fig. 27.

Solid, upper whorls smooth, the others with from 12–14 longitudinal plications, and spirally striated, lower part of body whorl not plicate, lip acute, rarely thickened; whitish, pearly or light yellowish, with chestnut flames at the suture, inner lip violaceous, outer lip with a spot at the base. Length, 3·7 mill.

Mediterranean Sea.

It is *R. elegans*, Brusina.

R. d'ORBIGNYI, Audouin. Pl. 67, fig. 68.

Imperforate, rather solid, with 8–10 longitudinal rounded ribs, spirally lirate; whorls 6, convex, suture distinct; aperture a little effuse below. Length, 3 mill.

Red Sea.

R. INCONSPICUA, Alder. Pl. 62, fig. 52.

Rather solid, but translucent, polished, whitish or light yellowish white, sometimes milk-white, occasionally obscurely maculated or shortly strigate with chestnut, apex corneous; numerously, narrowly costate, the interstices closely spirally striate; lip with white varix. Length, 1·8 mill.

Europe.

R. maculata, Brown, *R. variegata*, Schwartz, and var. *globosa*, Mörch (*R. Kisloensis*, Dunker), are synonyms.

R. DELICIOSA, Jeffreys. Pl. 63, fig. 85.

Narrowly rimate, somewhat thick, semipellucid, shining, white, with curved, acute, distant costæ and more numerous spiral liræ, of which the basal ones are more distinct; lip simple, thin, with exterior varix. Length, 2 mill.

Southern Europe.

Jeffreys has indicated a var. *multicostata.*

R. SYNGENES, Verrill. Pl. 68, fig. 97.

Imperforate, white, with 14–16 longitudinal, subdistant ribs, vanishing on lower part of body whorl, with closer spiral liræ, crossing the ribs, and more conspicuous on the base; there are also microscopic, close spiral striæ. Length, 3 mill.

Off Cape Hatteras, N. C.

R. FAYALENSIS, Watson. Pl. 67, fig. 72.

Nearly imperforate, white, with about 12 narrow, nearly continuous, distant, longitudinal ribs, fading below the periphery, somewhat remotely, feebly, spirally striate throughout; whorls 5, convexly conical, with linear, somewhat impressed suture; lip not varicose. Length, 1·67 mill.

Azores; 450–500 fms.

R. PYRRHIAS, Watson. Pl. 67, fig. 70.

Scarcely perforate, glossy, translucent white, with 13 strong, distant ribs, fading below, with distant, faint spiral striæ throughout, stronger on the base; whorls 6, flatly conical, rapidly increasing, suture slightly margined; lip varicose. Length, 2·75 mill.

Off Culebra Is., W. I.; 390 fms.

R. TRAJECTUS, Watson. Pl. 67, fig. 78.

Imperforate, strong, white, with about 18 narrow, rounded ribs, stopping on the periphery, spirally lirate throughout, stronger on the base; whorls 5, slopingly, slightly convex, suture linear.

Length, 1·5 mill.

Off Cape York, Australia.

R. MICROSTOMA, Watson. Pl. 67, fig. 75.

Imperforate, translucent, glossy, white, with 10–12 distant, rounded ribs, more or less continuous, microscopically spirally striate; whorls 6, slightly convex, roundly angulated at the periphery; aperture very small; lip varicose. Length, 3 mill.

Off Culebra Isl., W. I., 390 fms.

R. NOVARENSIS, Frauenf. Pl. 66, fig. 45.

Imperforate, thick, whitish, with two fulvous bands, with 12–13 narrow ribs, the interstices spirally striate; whorls 6, convex, subgradate; lip produced, varicose. Length, 3 mill.

Hab. unknown.

R. LILACINA, Recluz. Pl. 62, fig. 40.

Obtuse, solid, porcellanous, shining, violaceous, with curved distant ribs, and spiral, densely punctate, impressed striæ, apex dark violet; peristome thick, white, violet-margined, bidentate within, varix white, with an orange streak behind it. Length, 5 mill.

Atlantic Coast of France.

Turbo violaceus, Muhlf., is a synonym.

Section RISSOSTOMIA, Sars. 1878.

R. MEMBRANACEA, Adams. Pl. 61, figs. 19–26.

Rather thin, membranaceous, subhyaline, smooth or longitudinally costate, the last whorl inflated, smooth or with short costæ, lip expanded and thickened; corneous or brownish, with undulating, longitudinal chestnut lines, sometimes absent; outer lip usually with three chestnut spots. Length, 7–9 mill.

Europe.

Varies greatly in texture and sculpture.

The synonyms are *R. labiosa*, Montg., *R. fragilis*, Mich., *R. Souleyetiana*, Recluz, *R. pulla*, Brown, *R. cornea*, Lovén (Figs. 25, 26).

Var. OCTONA, Nilsson. Figs. 23, 24.

Shell narrower, more cylindrical.

Var. *angustissima*, Weinkauff, is a synonym.

R. LINEOLATA, Michaud. Pl. 61, fig. 28.

Thin, hyaline, vitreous, with 14–16 slightly oblique longitudinal ribs, last whorl ventricose, the lower part smooth; aperture subdilated below; color light yellowish or corneous, with narrow, longitudinal fulvous strigations, which become flexuous below, lip with a single spot below.

France.

R. LIA, Benoit. Pl. 62, fig. 33.

Rather solid, opaque, fulvous brown with white apex, with rounded longitudinal ribs and thin spiral striæ, the sculpture often obsolete on the last whorl; lip simple, columella tinted with violaceous. Length, 4 mill.

Mediterranean Sea.

R. Desmaresti, Audouin. Pl. 67, fig. 67.

Thin, elevated conical, with 10–12 low longitudinal costæ, fading out towards the base; whorls 6, slopingly flattened, suture distinct; peristome simple. Length, 3 mill.

Red Sea.

R. Waabitica, Issel. Pl. 68, fig. 98.

Rimate, somewhat solid, a little shining, opaque, white, longitudinally thinly costate, sculpture fading above the middle of the body whorl; interstices spirally striate; whorls 4½, slightly convex, with distinct suture; lip simple. Length, 1·3 mill.

Red Sea.

R. Psammitica, Issel. Pl. 68, fig. 99.

Rimate, fragile, subopaque, slightly shining, white, densely decussated by longitudinal ribs, fading out anteriorly, and close spiral striæ; whorls 4½, suture a little impressed; peristome thin.

Length, 1 mill.

Red Sea.

Section Persephona (Leach. 1852), Monts. 1884.

R. violacea, Desm. Pl. 62, figs. 37–39.

Solid, with subangulate periphery; longitudinal ribs 10, short on the last whorl, which is ornamented with spiral series of punctations; lip externally thickened; whitish, purplish on the spire, the periphery purple-zoned, peristome violaceous, the varix white.

Length, 5·3 mill.

Europe.

It is *R. punctata*, Potiez, *R. purpurea*, McAndrew, *R. amethystina*, Renier.

Var. rufilabrum, Alder. Fig. 38.

Corneous, yellowish or greenish yellow, not banded, lip chestnut color.

It is *R. hyalina*, Desm.

Var. porifera, Lovén. Fig. 39.

Corneous or yellowish, periphery rounded; without ribs, deeply spirally pitted; peristome chestnut color.

Var. *ecostata*, Jeffreys, is a synonym.

Section Schwartzia, Bucq., Dautz., Dollf. 1884.

R. monodonta, Bivona. Pl. 62, fig. 41.

Thick, hyaline, very smooth, shining, last whorl sometimes a little angulated; aperture expanded below, lip varicose exteriorly,

columella unidentate; whitish, irregularly flexuously strigate with chestnut, darker behind the varix, columella, periphery and apex violaceous. Length, 5·8 mill.

Mediterranean Sea.

It is *R. subcarinata*, Cantr., *R. dentata*, Dan. et Sandri.

R. VENUSTA, Phil. Pl. 62, fig. 32.

Thick, with 14–16 strong, rounded ribs, those of the body whorl terminating at the subangulated periphery, suture undulated; peristome subexpanded, varicose, columella bluntly unidentate; yellowish brown, with numerous chestnut longitudinal, sometimes flexuous lines, ribs white. Length, 7 mill.

Mediterranean Sea.

R. oblonga, Midd., is a synonym.

R. GROSSA, Mich. Pl. 66, fig. 36.

Thick, strongly, irregularly plicate; columella subplicate; yellowish white, with chestnut strigations between the ribs on the last whorl, and two maculations on the varicose lip. Length, 8 mill.

Mediterranean Sea.

R. OBLONGA, Desm. Pl. 62, fig. 45.

Shining, hyaline, with twelve wide longitudinal plications, short on the last whorl, suture subundulated; lip varicose, columella subplicate; white, fulvous between the ribs, three fulvous maculations on the lip. Length, 5 mill.

Mediterranean Sea.

It is *R. elongata*, Brusina.

R. ELATA, Phil. Pl. 62, fig. 44.

Shell with acute spire, shining, upper whorls smooth, afterwards with strong, irregular rounded costæ, evanescent on the base; lip much thickened, expanded, varicose; white, with fulvous short flames between the ribs, and three fulvous spots on the lip. Length, 8 mill.

Mediterranean Sea.

R. cylindracea, Kryn., is probably a synonym.

Jeffreys makes this species a variety of *R. membranacea*.

R. PARADOXA, Monts. (unfigured.) *Mediterranean.*

Section ZIPPORA, Leach. 1847.

R. AURISCALPIUM, Linn. Pl. 62, figs. 42, 43.

Narrow, subulate, with acute apex, hyaline, translucent, smooth or obsoletely widely costate, vanishing on the last whorl, base with

three or four spiral series of pits; aperture expanded below, lip dilated, varicose; whitish or yellowish, often strigate with chestnut, varix sometimes three-spotted with chestnut. Length, 7·6 mill.

Mediterranean Sea.

Readily distinguished by its Clausilia-like appearance. The synonyms are *R. marginata*, Laskey, *R. acuta*, Desm., *R. acicula*, Desm., *R. Drummondi*, Leach, *R. pulchella*, Risso, *R. latilabre*, Jan, and var. *expansilabris*, Bucq., Dautz., Dollf.

R. Sismondiana, Issel. Pl. 67, fig. 69.

Imperforate, thin, whitish, a little shining; longitudinally densely costulate, the interstices minutely spirally striate; whorls 9, slightly convex, suture margined; lip acute. Length, 2·5 mill.

Suez.

Section Turbella, Leach. 1847.

R. parva, DaCosta. Pl. 62, figs. 46–48.

Rather solid, smooth, shining, white or yellowish, variously clouded and irregularly banded with fulvous; with narrow, subdistant longitudinal rounded ribs, terminating abruptly on the middle of the body whorl, the intervals spirally striate; lip with a white varix, bearing two fulvous spots. Length, 4·3 mill.

Europe.

The synonyms are *Turbo albulus*, *œreus* and *subluteus*, Adams, *R. cerasina*, Brusina, *R. obscura*, Phil., *R. semicostulata*, Anton.

R. interrupta, Adams. Pl. 62, figs. 49, 50.

Thin, nearly pellucid, smooth, somewhat shining, with two interrupted irregular chestnut bands and intermediate chestnut flames, lip maculate with chestnut. Length, 4·3 mill.

Europe.

By some authors considered a variety of *R. parva*. It is *R. Matoniana*, Recluz.

R. dolium, Nyst. Pl. 62, fig. 51.

Hyaline, shining, whorls 5, rapidly increasing, with deep suture, with 14 plicæ and intermediate sulcations, abruptedly terminating on the periphery of the last whorl; lip scarcely varicose.

Length, 2·3 mill.

Mediterranean Sea.

It is *R. pusilla* and *R. nana*, Phil., *R. pulchra*, Forbes.

R. PULCHELLA, Phil. Pl. 62, figs. 53, 54.

Subperforate, obliquely subdistantly plicate, last whorl with the plicæ short, or smooth; yellowish, with fulvous flames between the ribs, often unimaculate on the base of the lip. Length, 2·3 mill.

Mediterranean Sea.

R. RADIATA, Phil. Pl. 63, fig. 55.

Imperforate, thin, hyaline, yellowish brown, irregularly fasciate, and strigate between the ribs with chestnut, lip with a chestnut spot; with or without a few obtuse ribs, vanishing at the periphery. Length, 4·2 mill.

Mediterranean, England.

It is *R. parva*, Jeffreys, *R. undata*, Bivona.

Var. SIMPLEX, Phil.

Very smooth, white or yellowish, with undulating chestnut longitudinal lines.

R. AMBLIA, Watson. Pl. 67, fig. 74.

Narrowly umbilicated, thin, glossy, horny white, with about 20 rounded, wavy ribs and narrower furrows, vanishing at the periphery, below it spiral threads; whorls 5½, moderately convex, with impressed suture, periphery very obsoletely angulated; outer lip thin. Length, 2·25 mill.

Off Palma, Canaries; 1125 fms.

R. ALGERIANA, Monts. Pl. 65, fig. 20.

Imperforate, with rounded longitudinal ribs and about equal interspaces, yellowish brown, with a brown subsutural band and three more on the base; lip simple, sharp. Length, 3 mill.

Algiers.

Monterosato remarks that it belongs to the same group as *R. Montagui*, and Weinkauff thinks it will prove a variety of that species.

Var. RUFULA, Monts.

Uniform reddish brown.

R. PINNÆ, Krauss. Pl. 68, fig. 88.

Imperforate, somewhat solid, shining, white, lineolate with chestnut, with 8–9 obtuse, remote longitudinal ribs, and obsolete spiral striæ; whorls 7, convex, with impressed suture; lip acute. Length, 5·8–6 mill.

Cape of Good Hope, on byssus of Pinna.

R. INCONSPICUA, Alder. Pl. 63, figs. 57, 58.

Rather solid, but translucent, shining; whitish or light yellowish white, occasionally milk-white, maculated or strigated with chestnut between the ribs, apex corneous; suture distinct but not deep; closely, thinly, longitudinally costate, less numerous and stronger in the last whorl, with close spiral striæ; lip white-varicose.

Length, 1·8 mill.

Europe.

It is *R. maculata*, Brown.

Var. VARIEGATA, Schwartz. Fig. 58.

Shell smooth, yellowish brown, longitudinally flamed with chestnut.

R. ALBELLA, Loven. Pl. 63, figs. 59–62.

Hyaline, subinflated, with convex whorls, spire costate, body whorl smooth, or distantly longitudinally costate above, or spirally striate; inner lip free, forming an umbilical fissure; whitish, flamed with chestnut at the suture and base, apex violaceous.

Length, 3–3·6 mill.

Northern Europe, Mediterranean Sea?

A very variable species; it is *R. Benzi*, Aradas & Benoit, *R. Oenonensis*, Brusina, *R. supracostata*, Sowb., *R. Targioni*, Appelius.

Var. SARSI, Lovén. Figs. 60–62.

Thinner, lip acute, entirely smooth, with a series of sutural maculations.

R. MARGINATA, Mich. Pl. 63, fig. 63.

Solid, shining, narrowly, rather distantly costulate, suture subundulated, white-margined; yellowish brown, ribs, base of body whorl and varix white, bimaculate with chestnut behind the varix.

Length, 5 mill.

Mediterranean Sea.

R. ANGULATA, Jeffreys. Pl. 65, fig. 16.

Imperforate, solid, opaque, a little shining; whorls 4, compressed, with 10–12 slightly curved strong ribs, and no spiral striæ, periphery distinctly angulated; lip acute. Length, 2 mill.

Adventure Bank, Mediterranean.

R. XANTHIAS, Watson. Pl. 67, fig. 71.

Scarcely rimate, thin, glossy, translucent white, with from 12–16 narrow, continuous ribs, vanishing towards the base—where there

are some faint spiral threads; whorls 7, flattened, the last with subangular periphery; aperture small, lip without varix.

Length, 2 mill.

Off Culebra Isl., W. I.; 390 fms.

R. Pernambucensis, Watson. Pl. 67, fig. 73.

Imperforate, polished, white, with 15–20 round, flexuous ribs, and broad interspaces, with faint microscopic spiral markings; whorls 5, flat, periphery not angulated; lip varicose.

Length, 2 mill.

Off Pernambuco, Brazil; 350 fms.

R. aurita, Monts. Pl. 65, fig. 17.

Close to *R. semistriata*, Mtg., but has more convex whorls, and narrow sulci. Length, 2 mill.

Algiers.

The author has only given distinctive characters for his species, and having no specimen, I cannot describe it.

R. doliolum, Phil. Pl. 65, fig. 19.

Pupiform, solid, whitish, or yellowish; with 14–16, flattened, irregular, close ribs, and undulated suture; lip not protracted, nor varicose. Length, 2·3 mill.

Red Sea; fossil in *Sicily.*

R. euchila, Watson. Pl. 63, fig. 72.

Rather solid, vitreous, shining, subopalescent; whorls 4–5, rapidly increasing, suture distinct; with 20–30 flexuous rounded ribs, about equalling the interspaces, vanishing below, spirally lirate; yellowish white, with two or three spiral series of chestnut spots.

Length, 1·5 mill.

Madeira.

Described by Watson as *R. Novarensis*, preoccupied by Frauenfeld.

R. turricula, Jeffreys. Pl. 65, fig. 18.

Minutely rimate, thin, semipellucid, a little shining, whitish; whorls 4, tumid, rapidly increasing, with deep suture; with 20–25 thin, distant, curved costæ, and no spiral sculpture.

Length, 1·2 mill.

Atlantic Ocean (subfossil?)

R. brychia, Verrill. Pl. 68, fig. 96.

Minutely rimate, thick, brownish, with about 14 rather close rounded ribs, fading on the lower part of the body whorl, and rather

wider interspaces, no spiral sculpture; whorls 4, the apex blunt, the others very convex, with deep suture; lip rather thin, without a varix. Length, 2·3 mill.

Off New England; deep sea.

R. HARPA, Verrill. Pl. 67, fig. 82.

Umbilicated, thin, with numerous longitudinal plications, and no spiral sculpture; whorls 5, very convex, rapidly increasing, with deep suture; aperture small, round, lip thin. Length, 3 mill.

Off New England; deep sea.

R. MUNDA, Monts. (unfigured.) *Sicily.*

Section MANZONIA, Brusina. 1870.

R. COSTATA, Adams. Pl. 63, fig. 66.

Longitudinally, distantly costate, costæ acute, elevated, nodose above, spirally densely lirate; whorls convex, round-shouldered, suture deeply incised; lip double, continuous, the internal smooth, rounded, the external widely reflexed, thinly sulcate.

Length, 3 mill.

Europe.

The synonyms are *R. exigua*, Mich., *R. carinata*, Phil., *Turbo plicatus*, Mühlf., *Turbo albus*, Donovan.

R. SIBIRICA, Leche. Pl. 65, fig. 21.

Turreted, elevated, brownish; whorls 5, round-shouldered, with 9–10 obtuse ribs, vanishing on upper part of body whorl, below are a few raised spiral lines; lip simple, edentulous. Length, 5 mill.

Arctic Ocean, Siberia.

R. MIRABILIS, Manzoni. Pl. 65, fig. 22.

Scalariform, subangulate in the middle, narrowly rimate; whorls 6½, very convex, with deep suture, with narrow, distant longitudinal ribs, the wider interstices closely spirally striate; yellowish violet. Length, 2·5 mill.

Canary Is.

R. GIBBER, Watson. Pl. 65, figs. 23, 24.

Widely umbilicated, gradate, solid, white or yellowish, sometimes more or less distinctly four banded with chestnut; whorls 4½–5, convex, with stout, rounded ribs, forming an undulated shoulder or suture above; umbilicus defined by a rib; lip continuous, duplicate.

Length, 2 mill.

Madeira and Pto. Sancto.

R. PUNCTURA, Mtg. Pl. 63, fig 67.

Imperforate, semipellucid, light brownish, with a chestnut stripe outside the aperture; embryonal whorls 2, punctate, normal whorls 6, convex, with deep suture, with numerous, close ribs, and spiral liræ; outer lip varicose. Length, 3 mill.

Europe, Teneriffe.

It is *R. textilis*, Lovén, *R. punctura*, Macgill., *R. insenghæ*, Calcara, *R. striatissima*, Rayn.

R. PARVULA, Jeffreys. Pl. 65, fig. 26.

Imperforate, somewhat solid, subtranslucent, scarcely shining; whorls 4, convex, longitudinally costate, ribs evanescent at the periphery, slightly spirally lirate, suture distinct but not deep; lip thin, smooth within. Length, 2 mill.

Portugal.

Probably not adult.

R. MACANDREWI, Manzoni. Pl. 63, fig. 68.

Imperforate, solid, yellowish chestnut; whorls 6, turreted or round-shouldered, with close, large, longitudinal ribs, rendered nodulous by spiral impressed lines; lip duplicate, the outer one expanded, with fimbriated edge. Length, 2·5 mill.

Canary Is.

Watson has described a variety SPRETA.

R. WATSONI, Schwartz. Pl. 64, fig. 89.

Imperforate, thin, translucent, shining, white, with chestnut maculations on the shoulder, between the ribs, with close strong spiral ribs, and longitudinal ones distinct on the shoulder only; whorls 4½, gradate, subscalar, with flattened shoulder to an angle, suture rather deep; lip a little thickened externally. Length, 2 mill.

Madeira.

R. AUBERIANA, d'Orb. Pl. 68, fig. 85.

Imperforate, thin, white, with brownish maculations, with numerous, thin, longitudinal and spiral costæ; whorls 6, convex, with sloping shoulder defined by an angle; lip thickened.

Length, 1·5 mill.

West Indies.

R. ZETLANDICA, Mtg. Pl. 63, fig. 86.

Imperforate, solid, opaque, whitish; cancellated and almost muricated by subequal longitudinal and spiral distant liræ; whorls 7, angularly shouldered above, suture deep, longitudinal sculpture

evanescent on lower part of body-whorl, where the spiral sculpture becomes more prominent; lip thickened. Length, 5 mill.

Europe.

The synonyms are *R. cyclostomata*, Recluz, and *R. scalariformis*, Thorpe. Jeffreys adds *R. carinata*, Aradas, and *R. canaliculata*, Phil.

R. CRISPA, Watson. Pl. 65, fig. 8.

Rimate, rather solid, somewhat shining, subvitreous, white, a little orange-tinted, with about 12 oblique costæ, vanishing below, crossed by spiral liræ, of which there are 7 on the last whorl, stronger below, the intersections crispate; whorls 5–6, convex, gradate, suture deep; lip thickened, externally crenated.

Length, 2 mill.

Madeira, Canaries.

R. MAYENI, Friele. Pl. 65, fig. 28.

More or less rimate, solid, reddish brown; whorls 5, carinate, with sloping shoulders, costate above, nodose at the carina, spirally lirate below. Length, 5 mill.

Arctic Ocean.

First published as *R. Jan-Mayeni;* subsequently simplified as above.

Friele has described a var. ALBA.

R. SIMULANS, Monts. Unfigured. (*R. Watsoni*, Monts., not Schwartz.) *Mediterranean.*

Section FOLINIA, Crosse, 1868.

R. INSIGNIS, Folin. Pl. 63, fig. 70.

Turreted, distantly obliquely ribbed, the extremities of the ribs undulating the shoulder of the whorls, spirally striate; whorls 5, rapidly increasing; lip wide, outer margin crenulated.

Length, 2·2 mill.

Panama.

The remarkable distinctive character of this group is the small posterior sinus of the aperture.

R. PHARAONICA and R. CLEOPATRÆ, Folin (unfigured.) *Egypt.*

Subgenus SABANÆA, Leach, 1847.

R. FLAMMEA, Frauenf. Pl. 63, fig. 64.

Thick, smooth, subpellucid, shining, vivid brick red; whorls 5, subgradate, with incised suture; lip a little thickened.

Length, 2 mill.

Botany Bay.

R. INCIDATA, Frauenf. Pl. 63, fig. 65.

Conoidal, thick, smooth, brownish; whorls 5, flattened, suture and periphery channeled; lip thickened. Length, 1·4 mill.

Botany Bay.

Section CORENA, A. Ad., 1870.

R. TUBERCULIFERA, A. Ad. (unfigured.) *Gulf of Suez.*

Section AMPHITHALAMUS, Carp., 1865.

R. MICROTHYRA, Martens. Pl. 63, fig. 69.

Smooth, a little shining, brownish corneous, sometimes with a white thread at the suture, smooth; whorls 5, slightly convex; aperture small, subcircular, peristome simple, thick. Length, 1·5 mill.

Mauritius.

R. BADIA, Watson. Pl. 67, fig. 81.

Scarcely umbilicated, smooth, shining, translucent chestnut, with fine growth lines, and a few microscopic spiral striæ, most apparent towards the top of the whorls and on the base; whorls 4½, slightly convex, rapidly increasing, with narrow, distinct suture; aperture produced from the body whorl, with duplicate, continuous lip.

Length, 1·5 mill.

Port Jackson, Sydney, Australia.

R. SCROBICULATOR, Watson. Pl. 67, fig. 80.

Pupiform, strong, shining, crimson-chestnut color, obliquely striate, with faint spiral striæ, more distinct below the suture and near the base; whorls 4½, flattened, suture linear; aperture somewhat detached and projecting, oblique, with duplicate continuous lip.

Length, 1·1 mill.

Port Jackson, Sydney, Australia.

R. OLIVACEA, Dunker. Pl. 66, fig. 43.

Imperforate, subpupiform, thick, a little shining, fulvous, obliquely longitudinally plicate, the plicæ 25–26 in number, upper part of spire smooth; whorls 6, flatly convex, with slightly incised suture; peristome duplicate, continuous. Length, 2 mill.

Sydney, Botany Bay, Australia.

R. FRAUENFELDI, Schwartz. Pl. 68, fig 86.

Thick, subpellucid, chestnut color, smooth towards the apex, below with 18–20 somewhat oblique longitudinal plicæ; whorls 6½, somewhat convex, with impressed suture; peristome thick, continuous, duplicate?. Length, 3·2 mill.

Sydney, Australia.

Unfigured Species.

R. LACUNATA, R. INCLUSA, Carp. *California.*
R. OBESA, R. PUPOIDES, H. Ad. *Lord Hood's Isl.*
R. PELLYÆ, Nevill. *Adelaide, So. Australia.*

Section NODULUS, Monts. 1878.

R. CONTORTA, Jeffreys. Pl. 69, figs. 40–42.

Narrowly umbilicated, somewhat solid, shortly cylindrical with obtuse apex, yellowish or white, with two fulvous bands, smooth, shining; whorls 4, ventricose, with deep suture; aperture subrotund, subeffuse, peristome continuous. Length, 1·2 mill.

Mediterranean Sea.

Var. ELATA, B. D. D. Fig. 41.

Spire lengthened.

Var. INTORTA, Monts. Fig. 42.

Spire shorter, very smooth, last whorl more solute.

R. NITIDA, Brusina. Pl. 69, figs. 43, 44.

Rather solid, white, vitreous, transparent, apex obtuse; whorls 6, slightly convex, smooth, suture not deep; lip continuous, slightly varicose, a little produced below. Length, 2·25 mill.

Mediterranean Sea.

It is *R. glabrata*, var. *nitida*, Brusina.

R. GLABRATA, Mühlf. Pl. 69, figs. 45, 46.

Pupiform, rather solid, opaque, smooth, fulvous brown; whorls 6, somewhat convex, the last narrower than the preceding whorl, suture not deep; peristome thick, continuous, patulous at the base.

Length, 1·5 mill.

Mediterranean Sea, Madeira.

R. punctulum, Phil., *R. Mandralisci*, Aradas, and *R. sabulum*, Cantraine (fig. 46), are considered synonyms.

R. LINCTA, Watson. Pl. 69, fig. 47.

Rather thick, transparent, glossy, white, sometimes with a yellowish cast, smooth, barely microscopically striate, more distinctly so at the base; whorls 4–4½, convex, suture deep; peristome subcontinuous. Length, 1·5 mill.

Madeira.

R. LÆVIS, Monts. Pl. 69, fig. 48.

The only description of this species is "Its solidity and the teeth of the aperture readily distinguished it from its congeners." The figure does not exhibit any apertural teeth.

Algiers.

It belongs to Monterosato's group *Peringiella.*

R. EPIDAURICA, Brusina. Pl. 69, fig. 49.

Minute, aciculately-subcylindrical, obtuse, thin, hyaline, very smooth, suture moderate, aperture dilated, with simple peristome. Length, 1·5 mill.

Dalmatia, Sicily.

R. SEMINULUM, Monts.

Like *R. glabrata*, but larger, aperture more produced, peristome chestnut-margined.

Algiers.

Possibly a Barleeia.

R. NITENS, Monts. (unfigured.) *Mediterranean.*

Section ANABATHRON, Frauenf. 1867.

R. CONTABULATA, Frauenf. Pl. 69, figs. 50, 51.

Thick, shining, reddish or purplish; whorls 5½, scalariform, the upper part shouldered, and the angle carinated, there is an inferior carina on the body whorl, suture more or less channeled; lip thick, continuous. Length, 1·4 mill.

Botany Bay, Australia.

Section PELECYDIUM, Fischer. 1872.

R. VENUSTULA, Folin. Pl. 69, fig. 53.

Imperforate, white, subpellucid, transversely striate; whorls 7–8, subplanate, with linear suture, apex obtuse, mamilliform, last whorl deviately descending; aperture produced, exserted, semicircular, entire, peristome subthickened. Length.?

Sonda Strait.

R. VITREA, Garrett. Pl. 68, fig. 18.

Minute, thin, pellucid, smooth, microscopically spirally striate, shining, white; whorls 5, flattened convex, apex obtuse, suture well impressed, slightly margined; peristome rather thick, simple.

Length, 7·5 mill.

Viti Is.

Section HEMISTOMIA, Crosse. 1872.

R. CALEDONICA, Crosse. Pl. 68, fig. 20.

Subimperforate, subtranslucent, thin, light olivaceous corneous, under a darker epidermis; whorls 5½, somewhat convex, moderately increasing, with impressed suture; lip simple, continuous, subsolute.

Length, 2·5 mill.

New Caledonia, brackish water.

Subgenus CINGULA, Fleming. 1828.

Section CINGULA (sensu stricto).

R. CINGILLUS, Mtg. Pl. 69, fig. 25.

Rather solid, scarcely pellucid, yellowish brown, with two or three chestnut bands; whorls 6, flattened, spirally striate; lip acute, not thickened. Length, 4·3 mill.

Atlantic Coasts of Europe.

It is *R. vittatus*, Donovan, *R. trifasciata*, Adams, *Turbo graphicus*, Brown.

Var. RUPESTRIS, Forbes. Not banded.

R. BALTEATA, Manzoni. Pl. 69, fig. 57.

Thin, hyaline, smooth, suture widely margined, apex obtuse; whorls 3½, flattened; lip simple, solid; narrowly rimate.

Length, 1·5 mill.

Canary Is.

This should possibly be referred to Ceratia.

R. MILLERI, Folin. Pl. 71, fig. 94.

Rather smooth, with obscure decussating very minute lines, yellowish or orange color, shining; whorls 6, slopingly flattened, the last with scarcely angulated periphery, suture deep; lip thickened below, base with a few spiral striæ. Length, 3·7 mill.

Cape Verd Is.

R. CONICA, Perier. Pl. 71, fig. 95.

Shell yellowish, banded with light chestnut, two bands above the periphery of the last whorl and one below it; whorls 5, flattened,

the last with sharp peripheral angle; columella a little twisted, lip acute. Length, 2·8 mill.

Panama.

R. ANGULIFERENS, Folin. Pl. 70, fig. 62.

Shining, very minutely longitudinally and spirally striate, whitish, with a broad fulvous band on the top of the whorls, and another on the middle of the base; whorls 6, flattened with slight angle above and below the deep suture, and sharply angulated periphery; peristome acute. Length, 2·5 mill.

Panama.

R. TENUISCULPTA, Watson. Pl. 69, fig. 55.

Scarcely rimate, thin, vitreous, pellucid, yellowish white, with incremental striæ, and distant, irregular, very slight spiral lines; lip thin, a little produced below. Length, 2 mill.

Madeira, Algiers, etc.

R. SCOPULORUM, Watson. Pl. 70, fig. 60.

Thin, smooth, glossy, rufous brown; whorls 9, flattened, with obscurely angulated periphery and short base, suture slight, defined by the peripheral projection of the whorl above; lip thin, slightly patulous on the base. Length, 1·75 mill.

Reefs off Honolulu, Sandwich Is.

R. RUSTICA, Watson. Pl. 70, fig. 61.

Rather thick, white, with or without slight traces of longitudinal ribs, and traces of microscopic spiral lines, smooth, polished, apex large, rounded; whorls 6, periphery very obsoletely angular, suture linear, not impressed; lip sharp, patulous, but a little inverted above; umbilicus rimate. Length, 3 mill.

Off Pernambuco, Brazil; 350 fms.

R. ALVEARIUM, Watson. Pl. 70, fig. 59.

Slightly umbilicated, with blunt apex, barely convex whorls, suture linear; glossy white; lip simple. Length, 1·25 mill.

Off Culebra Isl., W. Indies; 390 fms.

R. MERCURIALIS, Watson. Pl. 64, fig. 92.

Imperforate, white, translucent, shining, apex obtuse; whorls 7, slightly convex, with faint growth-lines and close-set spiral striæ, suture narrowly margined, not deep; lip a little expanded.

Length, 3·75 mill.

Wednesday Isl.; N. E. Australia.

Possibly a Ceratia.

R. VILLÆ, Issel. Pl. 71, fig. 87.

Rimate, pale corneous or luteous, pellucid, a little shining, smooth, very slightly longitudinally striate; whorls 5½, convex, suture margined; peristome a little thickened. Length, 2–2·5 mill

Gulf of Suez.

R. LANTZI, Velain. Pl. 71, fig. 83.

Rather thick, upper whorls subangulated, the last with rounded periphery, with spiral engraved lines; white; lip sometimes slightly thickened externally. Length, 2 mill.

Isl. St. Paul, Indian Ocean.

R. SUBTRUNCATA, Velain. Pl. 71, fig. 88.

Thick, solid, imperforate; whorls 3, apex obtuse, all smooth, white; lip thickened within. Length, 1 mill.

Ins. St. Paul, Indian Ocean,

R. CAZINI, Velain. Pl. 71, fig 84.

White, thick, smooth, imperforate; whorls 5, slightly convex; lip strongly thickened within. Length, 2 mill.

Ins. St. Paul, Indian Ocean.

R. AUSTRALIÆ, Dunker. Pl. 71, fig. 81.

Somewhat thick, subpellucid, corneous; whorls 6, subconvex, spirally thinly lined, the last whorl with 6–7 lines.

Length, 2·4 mill.

Sydney, Australia.

R. PURPUREA, Hutton. Pl. 71, fig. 89.

Elongated, with 6 rather flattened, not polished whorls; corneous brown, becoming purple or purplish red on the spire, with a white sutural band. Length, 2·5 mill.

New Zealand.

Var. SUBFUSCA, Hutton.

Whorls 5, flattened, smooth, but not polished; pale brown.

Length, 3 mill.

R. CYCLOSTOMA, Tenison Woods. Pl. 71, fig. 8.

Scarcely perforate, smooth, opaque, olivaceous or brownish, lighter or whitish colored below the suture, apex obtuse; whorls 6, flatly convex, thinly striated; aperture small, rounded, produced.

Length, 4 mill.

Tasmania.

The author describes a variety ROSEA, which differs only in color.

R. SEMICARINATA, Folin. Pl. 70, fig. 58.

Whitish, subdiaphanous, whorls flatly convex, spirally cingulate. Length, 1·5 mill.

New Caledonia.

R. ROBUSTA, Dall. Pl. 71, figs. 76, 77.

Shell smooth, scarcely rimate, with impressed suture; whorls 4–5, slightly convex, purplish with whitish bloom, with very fine spiral striæ particularly towards the base. Length, 5 mill.

Aleutian Is.; *Plover Bay, E. Siberia.*

Dr. Dall calls the normal form var. *Martyni*, so that that name may be substituted in the event of *robusta*, Lea being recognized.

Var. SCIPIO, Dall. Fig. 77.

Shell more slender. Perhaps males, and the stouter ones females. The occurrence of a certain number of intermediate specimens is mentioned.

R. CERINELLA, Dall. Pl. 71, fig. 79.

Narrowly rimate, smooth, not polished. Length, 3 mill.

Behring Sea.

Close to *C. proxima*, Alder, but differs in the absence of spiral striation and in having less truncate apex, and one less whorl.

C. ALEUTICA, Dall. Pl. 71, fig. 78.

Slightly umbilicated, smooth, with faint growth-lines, no spiral sculpture, suture distinct, whorls moderately convex; brownish, the slightly expanded edge of the aperture blackish. Length, 3·5 mill.

Aleutian Is.

More slender and smaller than *C. minuta*, Totten, less slender and without the sculpture of *C. aculeus*, Gould.

R. EXILIS, Tryon. Pl. 71, fig. 80.

Whorls 6, convex, with well-marked suture, aperture small, surface covered with slight revolving striæ, light brown.

Length, 3·3 mill.

San Diego, Cal., on salt-water grass.

R. STIMPSONI, Smith. Pl. 71, fig. 73.

Whorls 7, convex, with deep suture, distinctly wrinkled by growth lines, apex obtuse, shell thin, dark brown. Length, 5·7 mill.

Greenport, Long Island, New York.

I am not acquainted with this species, of which two specimens occurred to the author.

C. LÆVIS, DeKay. Pl. 71, fig. 75.

Shell moderately solid, with 5 very convex whorls, separated by a deep suture, smooth, white in adult specimens, corneous in the young; aperture small, umbilicus distinct and rather large.

Length, 5 mill.

New York, Connecticut.

This poorly described and figured species has not been recognized; it may be identical with the preceding one, or the following.

R. MINUTA, Totten. Pl. 71, fig. 74.

Thin, smoothish, apex obtuse, suture well-impressed, narrowly umbilicated, yellowish-brown to ferruginous; whorls 5, convex, very finely striate. Length, 3·75 mill.

New England, Florida.

R. GEORGIANA, Pfeffer. Pl. 71, fig. 2.

Imperforate, shining, smooth, or microscopically striate with growth-lines, whitish, under a thin greyish straw-colored epidermis; whorls 5, flattened convex, with moderately impressed suture; peristome continuous. Length, 2·4–2·8 mill.

South Georgia Isl.

Unfigured and Undetermined Species of Cingula.

R. PETINGENSIS, Gould. (Pl. 71, fig. 82.) = *Paludestrina.*
R. MODESTA, H. C. Lea. = *Assiminea.*
R. SANDERSONI, Verrill. *Cape Hatteras, N. C.*
R. CONICA, C. CONCINNA, R. SOLIDA, C. B. Ad. *Jamaica.*
R. VERRILLI, and R. ISLANDICÆ, Friele. (Desc. inaccessible to me). *Arctic Ocean.*
R. PUNCTATO-STRIATA, Tenison Woods. *Tasmania.*
R. ATOMARIA, Gould. *China Sea.*
R. SCHLOSSERIANA, Brusina. = *Leachia elongata*, Phil.
R. FILOSA, Brusina. *Suez.*
R. PAUPERCULA, C. B. Ad. = *Diala.*

Section ONOBA, H. and A. Adams, 1854.

R. STRIATA, Mtg. Pl. 63, figs. 71, 73.

Rather solid, opaque, scarcely shining, whitish or yellowish, with two chestnut bands; whorls 6–7, moderately convex, spirally closely striate, upper portion of whorls shortly longitudinally plicate; lip, in the adult, slightly varicose externally.

Length, 4 mill.

Atlantic Coast of Europe, ? Mediterranean Sea, Nahant, Mass., Halifax, N. S.

The synonyms include *R. minutissima*, Mich., *R. communis*, Forbes, *R. semicostata*, Turton, *Pyramis discors* and *candidus*, Brown, *R. gracilis*, Macg., *R. Marionæ*, Macg. The American localities are for *R. multilineata*, Stimpson (fig. 73), which appears to be identical.

Var. LIRATA, Watson.

Ribs and basal spiral sculpture stronger.

Madeira.

R. SAXATILIS, Möller. Pl. 64, figs. 87, 88.

Imperforate, thin; whorls 4, very convex, with deep suture, spirally cingulated; yellowish white, translucent. Length, 3 mill.

Greenland, Behring's Sea, New England.

R. arctica, Lovén, and, I think, *R. leptalea*, Verrill (fig. 88), who has so named a single specimen occurring in New England waters, are synonyms.

R. ACULEUS, Gould. Pl. 70, fig. 64c.

Imperforate, but with a slight depression partly covered by the inner lip, apex blunt; whorls 6, moderately convex, with regular, crowded microscopic, spiral lines; aperture simple, entire; light yellowish horn color. Length, 3·5 mill.

New England.

Some European authors consider this a synonym of *R. striata*, Mtg.

R. AFFINIS, Jeffreys. Pl. 66, fig. 39.

Rather thin, semitransparent, glossy, whitish; whorls 4, slightly, indistinctly spirally striate; apex blunt; outer lip thin, somewhat expanded. Length, 2·75 mill.

Vigo Bay.

Has fewer whorls than *R. striata* or *R. aculeus*, and they are less convex than in *R. saxatilis*.

R. ARENARIA, Mighels and Adams. Pl. 63, figs. 74, 75.

Whorls 6, convex, longitudinally subplicate, minutely spirally striate, suture impressed, whitish. Length, 2·5 mill.

Greenland, Canada, Maine, Spitzbergen.

Stimpson changed the name to *R. Mighelsi* on account of *Turbo arenarius* (Mtg.?) Maton, Turton, etc., which, however, is *Odostomia decussata*. *R. exarata*, Stimpson, is a synonym; but the figure of

that species in Gould's Invertebrata of Massachusetts (fig. 75), must represent an extreme variety.

R. BRACHIA, Watson. Pl. 64, fig. 90.

Umbilicated, thin, translucent, whitish; whorls 4, rounded, spirally carinated, carinæ 5 on the upper part of the last whorl, with several less distinct ones on the base; outer lip sharp, varicose externally. Length, 1·25 mill.

N. of Culebra Isl., West Indies; 390 fms.

R. MORCHII, Collin. Pl. 69, fig. 56.

Narrowly perforate, semipellucid, yellowish brown, apex obtuse; whorls 4, convex, with channeled suture, spirally ridged, about eight ridges on the last whorl. Length, 3 mill.

Siberian Sea.

R. CARINATA, Mighels and Adams. Pl. 63, fig. 76.

Shell very thin, ferruginous; whorls 5, convex, the upper ones with longitudinal ribs, the lower half of the body whorl spirally striate; aperture nearly orbicular, peristome thin and sharp.

Length, 2·6 mill.

Maine, northwards.

It is *R. semicostata*, Migh. and Ad. (not Mtg.), and *R. pelagica*, Stimpson.

R. AEDONIS, Watson. Pl. 64, fig. 91.

Rather strong, subtransparent, white, apex blunt; whorls 5, convex, spirally lirate, about 15 on the last whorl, the interspaces much wider; outer lip sharp, thin. Length, 2·5 mill.

Nightingale Isl., Tristan da Cunha; 100 to 150 fms.

R. TRANSENNA, Watson. Pl. 64, fig. 100.

Narrowly umbilicated, apex obtuse, translucent white; whorls 5–5½, moderately rounded, with a smooth space below the suture, then spiral threads, 16–18 on the body whorl, separated by wider interspaces; outer lip sharp, with a feeble external varix.

Length, 2·5 mill.

Between Marion and Prince Edward Is.; 140 fms.

R. PACHIA, Watson. Pl. 64, fig. 98.

Scarcely perforate, subtransparent, suture scarcely impressed, white; whorls 5, narrowly, concavely shouldered, then convex, with faint spiral threads and wider interspaces; lip sharp, with a remote external varix. Length, 2·5 mill.

Off Pernambuco, Brazil; 350 fms.

R. GLAPHYRA, Watson. Pl. 64, fig. 97.

Scarcely perforate, thin, hyaline, white, apex blunt, suture narrowly margined, slightly impressed; whorls 5, very feebly ribbed at the suture of the body whorl, very faintly, spirally flat-ridged and furrowed; outer lip thin and sharp. Length, 1·5 mill.

Off Nightingale Isl., Tristan da Cunha; 100–150 fms.

R. MONIZIANA, Watson. Pl. 63, fig. 80.

Umbilicated, rather thin, frosted (not glossy), transparent, slightly longitudinally puckered beneath the suture; whorls 4–5, convex, with a narrow, sloping shoulder, spirally ridged, ridges on body whorl 7–9; lip subexpanded, thick. Length, 1·75 mill.

Madeira Is.

R. CASTANEA, Möller. Pl. 63, fig. 77; Pl. 64, figs. 95, 96.

Imperforate, opaque, chestnut color, apex obtuse; whorls 4½, convex, with impressed suture, and distinctly angulate, about 12 lines on the last whorl. Length, 4 mill.

Norway, Iceland, Greenland, Behring's Sea, Gulf of St. Lawrence.

Var. ALASKANA, Dall. Fig. 96.

Thinner, with rather prominent sutural wrinkles, smaller, with same number of whorls. Under the pale, yellowish epidermis, the shell is pinkish. Length, 2·5 mill.

Behring's Sea.

R. CASTANELLA, Dall. Pl. 64, fig. 93.

Whorls 5, convex, spirally ridged, about 6 to 12 on the body whorl, varying in number; narrowly umbilicated; peritreme continuous, slightly thickened; pinkish or brownish white under the epidermis. Length, 2·7 mill.

Behring's Sea.

R. AURIVILLII, Dall. Pl. 64, fig. 94.

Narrowly umbilicated, waxen or yellowish; whorls 5½–6, with strong spiral ridges and concave, much wider interspaces, there are about 8 ridges on the body whorl; lip continuous, slightly thickened. Length, 4·3 mill.

Aleutian Is.

R. GRISEA, Martens. Pl. 68, fig. 92.

Scarcely umbilicated, semipellucid, reddish grey, whitish near the aperture, under an ash colored, caducous epidermis; whorls 4, convex, with low spiral cingulæ, separated by narrow impressed striæ; lip thickened, interior orange-corneous. Length, 2·25 mill.

South Georgia.

R. CINGULATA, Phil. Pl. 68, fig. 93.

Somewhat solid, translucent; whorls 6, convex, with linear suture, spirally lirate, with wider interspaces, 10 liræ on the last whorl; lip simple, sharp; yellowish brown. Length, 4 mill.

Sicily.

R. TENERA, Phil. Pl. 68, fig. 94.

Thin, pellucid, brownish white; whorls 5, with deep suture, and strong spiral ridges, of which there are 9–10 on the last whorl, the wider interstices slightly longitudinally striated; lip simple, dentate by the ridges. Length, 2 mill.

Near Syracuse, Sicily.

R. CRISTALLINULA, Manzoni. Pl. 65, fig. 7.

Vitreous, translucent, shining; whorls 5, with margined suture, the last numerously spirally striate; lip a little thickened, subproduced; subperforate. Length, 1·5 mill.

Canary Is.

R. CALLOSA, Manzoni. Pl. 65, fig. 6.

Imperforate, solid, opaque, whitish, with short spire and indistinct, submargined suture; whorls 5, closely spirally striate, last whorl inflated; lip simple, rather thick. Length, 1·6 mill.

Canary Is., Madeira.

R. depicta, Manzoni (= *R. punctifera*, Watson Ms.) is a synonym.

R. LAURÆ, Folin. Pl. 71, fig. 99.

Polished, crystalline, smooth, obscurely spirally lirate at the periphery and base; whorls 8, slightly convex, with shallow suture; aperture with thickened lip, spirally lirate within. Length, 2 mill.

Panama.

Unfigured and Undetermined Species.

R. DELICATA, Phil. *Red Sea.*

R. LIGATA, Gould. *Hong Kong.*

R. PROCERA, R. SUBULINA, R. ELEGANTULA, R. MUNDULA, R. SPIRATA, R. PATULA, R. MIRIFICA, R. LUCIDA, R. EGREGIA, all of Arthur Adams. *Japan.*

R. ALBOLIRATA, Carp. *Cape St. Lucas, L. California.*

R. TURRICULA, H. C. Lea. *So. Carolina.*

This species has not been identified.

Section CERATIA, H. and A. Adams, 1854.

R. PROXIMA, Alder. Pl. 63, fig. 82.

Somewhat solid, a little shining, semipellucid, yellowish white; whorls 6, convex, with impressed suture, almost smooth, very slightly spirally striate; lip a little thickened, but not varicose.

Length, 3 mill.

Europe.

R. striatula, Jeffreys and probably *R. pupoides*, Requien, are synonyms.

R. MACRA, Watson. Pl. 64, fig. 99.

Imperforate, thick, subtransparent white, apex obtuse; whorls 6, rather flat, with narrowly margined suture, and slight spiral striæ; outer lip sharp, very feebly varicose. Length, 2·5 mill.

Off Nightingale Isl., Tristan da Cunha; 100–150 fms.

R. TRUNCATA, Garrett. Pl. 63, fig. 79.

Imperforate, thin, pellucid, shining, white, apex blunt; whorls 5, slightly convex, closely spirally striate; peristome thick, slightly expanded. Length, 2 mill.

Viti Is.

Unfigured Species.

R. PYRGULA, A. Ad. — *Gulf of Suez.*
R. MACCOYI, Tenison Woods. — *Tasmania.*
R. VARIEGATA, Tapparone. — *Papuan Is.*

Section HYALA, H. and A. Adams. 1854.

R. VITREA, Mtg. Pl. 63, fig. 81.

Imperforate, thin, semipellucid, yellowish white, smooth, very lightly spirally striate, apex obtuse; whorls 6, convex, oblique, with deep suture; lip simple, thin, contracted. Length, 4 mill.

Europe.

It is *R. glabrata*, Fleming, *R. crystallina* and *R. virginea*, Brown.

Unfigured Species.

R. CONCINNA and R. NITIDA, A. Ad. — *Gulf of Suez.*
R. PUMILA, A. Ad. — *Gulf of Suez, Japan.*
R. GLABRATA, Phil. — *Japan.*

Section PLAGIOSTYLA, Fischer, 1872.

R. ASTURIANA, Fischer. Pl. 66, fig. 52.

Smooth, translucid, spire papillary, imperforate, white; whorls 4½, subglobose, suture margined, last whorl obliquely ventricose; lip subthickened, columella callous. Length, 2·5 mill.

Asturia, Spain.

Section SETIA, H. and A. Adams. 1854.

R. SEMISTRIATA, Montagu. Pl. 69, fig. 21.

Subsolid, scarcely pellucid, a little shining, whitish with two or three spiral series of faint chestnut maculations, suture deep; whorls 5, convex, spirally striate, base rimate. Length, 2·3 mill.

Europe.

R. marmorata, Cantr., *R. maculata*, Monts., *R. subsulcata*, Phil., *R. tristriata*, Thompson, *R. pulchra*, Johnson, and possibly *R. granulum*, Phil., *R. aemula*, Granata, and *R. Galvagni*, Aradas, are synonyms.

R. PULCHERRIMA, Jeffreys. Pl. 69, figs. 22, 26.

Thin, smooth, striulate, subperforate; whitish, with four spiral series of chestnut maculations on the last whorl, sometimes more or less confluent into strigations, apex obtuse, mamillary; whorls 4, very convex, with deep suture, last whorl expanding towards the aperture, base rimate. Length, 2 mill.

Europe.

R. amabilis, Monts., is probably a synonym, and I think that *R. depicta*, Weinkauff (fig. 26), not Manzoni, may also be placed here.

R. PICTA, Jeffreys. Pl. 69, fig. 23.

Somewhat solid, semipellucid, shining, spirally striated, yellowish white, with spiral series of chestnut spots, apex obtuse, suture moderate, submargined; whorls 5–6, compressed rounded, base imperforate. Length, 1·75 mill.

Portugal, Canary Is., Madeira.

Probably a variety of *R. semistriata.*

R. BENJAMINA, Monts. Pl. 69, fig. 24.

Thin, transparent, yellowish, very slightly striate, with series of chestnut maculations, apex obtuse; whorls 5, slightly convex, with distinct suture, base imperforate; lip acute. Length, 2 mill.

Mediterranean Sea, Portugal.

It is *R. concinna*, Monts., not S. Wood, and probably a variety of *R. semistriata.*

R. PERMINIMA, Manzoni. Pl. 69, fig. 28.

Imperforate, smooth; whorls 4, yellowish, with or without bands of small chestnut spots, suture margined. Length, 1·25 mill.

Canaries, Madeira.

Too closely allied to *R. pulcherrima*, Jeffreys.

R. ALBUGO, Watson. Pl. 69, fig. 27.

Scarcely rimate, pellucid, thin, smooth, whitish or yellowish, with series of small quadrate chestnut spots, sometimes confluent, with a series of opaque white spots on the periphery; whorls 5½, subangular, spirally sulcate beneath the angle; lip thin, acute.

Length, 1·6 mill.

Canary and Madeiran Is.

Perhaps only a variety of *R. semistriata.*

R. MADREPORICA, Issel. Pl. 71, fig. 86.

Rimate, thin, a little shining, densely spirally striate, white; whorls 4½, a little convex, with well-impressed, margined suture; columella a little twisted, outer lip thin. Length, 1·3 mill.

Gulf of Suez.

R. SCULPTILIS, Monts. Pl. 71, fig. 93.

Shell a little shouldered, smooth, yellowish, with dark colored punctate dots in spiral series, about six series on the body whorl; lip a little thickened. Length, 1·5 mill.

Algiers.

Subsection MICROSETIA, Monts. 1884.

R. TURGIDA, Jeffreys. Pl. 69, fig. 29.

Rimate, thin, pellucid, very smooth, white or light yellowish, a little shining, the periphery with a spiral line, apex obtuse; whorls 5, convex, the last dilated, suture distinct. Length, 2·2 mill.

Northern Norway, New England; (487 fms.)

R. obtusispira, Seguenza, *R. oblita*, Tiberi, and *R. soluta*, var. *laevis*, Sars, are synonyms.

R. TUMIDULA, Sars. Pl. 69, fig. 30.

Rimate, thin, semipellucid, corneous, very lightly spirally striate, apex obtuse; whorls 4, convex, with deep suture. Length, 2·5 mill.

Arctic Norway.

R. ABJECTA, Watson. Pl. 69, fig. 31.

Subsolid, opaque, yellowish white, unicolored; whorls 5–8, somewhat flatly convex, suture thread-like, slightly channeled, surface very minutely spirally striate. Length, 2 mill.

Madeira.

R. FULGIDA, Adams. Pl. 69, fig. 33.

Scarcely rimate, rather thin, semipellucid, smooth, light yellowish, bifasciate with chestnut, penultimate whorl sometimes chestnut color; whorls 4, tumid, with deep suture. Length, 7 mill.

Europe.

It is *R. pygmaea*, Mich. Jeffreys has indicated a var. *pallida*.

R. FUSCA, Phil. Pl. 69, fig. 34.

Scarcely rimate, smooth, brownish, apex obtuse; whorls 4–4½, convex. Length, 1 mill.

Sicily.

R. inflata and *R. turriculata*, Monts., *R. paludinoides*, Calcara, are synonyms.

R. ALLERYANA, Arad. et Benoit. Pl. 69, fig. 35.

Scarcely umbilicated, thin, very smooth, pellucid, white; whorls 4, very convex, with deep suture; lip continuous, simple.

Length, 1 mill.

Sicily.

R. ambigua, Brugn., and var. *solidula*, Monts., are synonyms.

R. SCIUTIANA, Arad. et Benoit. Pl. 69, fig. 36.

Shell imperforate, smooth, vitreous, shining, yellowish chestnut, spire obtuse; whorls 5, convex, suture moderately impressed.

Length. ?

Sicily.

R. zancleana, Arad. (in tavola) is a synonym.

R. MICROMETRICA, Seguenza. Pl. 69, fig. 39.

Thin, smooth, subtransparent, yellowish, with three or four chestnut bands, suture deep; whorls 4, convex, the last subinflated, base narrowly rimate. Length, 1·25 mill.

Mediterranean Sea.

R. MARIÆ, Tenison Woods. Pl. 71, fig. 9.

Scarcely rimate, thin, translucent, smoky horn-colored, two-banded with yellow, polished; whorls 4, ventricose, sloping.

Length, 2·5 mill.

Tasmania.

R. ATKINSONI, Tenison Woods. Pl. 71, fig. 10.

Imperforate, but channeled, polished, translucent, pale horn color, obscurely bifasciate with dusky brown, columella black; normal whorls 5, well rounded; aperture produced below, lip thin, acute, columellar lip reflected into a false umbilicus. Length, 1 mill.

Tasmania.

R. POLYCHROMA, Folin. Pl. 70, fig. 63.

Smooth, a little shining, apex obtuse, scarcely longitudinally striate, with a very minute spiral thread on the periphery; whorls 5, the first two with very minute quadrangular impressions, reddish, yellowish or violaceous, or corneous white, with obscure darker bands; aperture subcircular, peristome simple, sharp.

Length, 1·7 mill.

Bay of Panama.

R. PULICARIA, Folin. Pl. 71, fig. 96.

Very smooth, shining, white, with a series of oblong chocolate spots on the periphery and spire, base with a dark band; whorls 5, subglobose, suture linear, scarcely impressed; aperture subcircular, lip simple. Length, 1·3 mill.

Mauritius.

R. BRAZIERI, Tenison Woods. Pl. 71, fig. 97.

Rimate, smooth, white, broadly banded with fulvous above the periphery, narrowly banded below it, under an olive epidermis; whorls 5, rounded, the last with sharply angulated periphery; lip sharp. Length, 3 mill.

Tasmania.

R. NITENS, Dunker. Pl. 71, fig. 100.

Umbilicated, smooth, shining, subpellucid, white, with two inconspicuous pale fulvous bands; whorls 4, convex, with incised suture, columella often violet tinted. Length, 1·4 mill.

Botany Bay, Australia.

R. ATROPURPUREA, Dunker. Pl. 71, fig. 1.

Umbilicated, smooth, pellucid, polished, dark purple; whorls 4, rapidly increasing, suture incised; lip subthickened.

Botany Bay and Sydney, Australia.

R. LIMBATA, Hutton. Pl. 71, fig. 98.

Narrowly umbilicated, polished, smooth; whorls flatly convex, the last with angulated periphery; pale olivaceous with zigzag white strigations, most apparent as a sutural and a peripheral band.

Length, 3 mill.

New Zealand.

Unfigured Species Referred to Microsetia.

R. MACILENTA, R. PUMILA, R. CELATA, Monts. *Mediterranean.*
R. OCHROLEUCA, and R. FICARATIENSIS, Brugnone. *Mediterranean.*

R. VEXILLATA, Brusina. *Mediterranean.*

R. Cossuræ, Calcara, *R. fasciata*, Requien and *R. Joenia*, Arad. and Benoit, are synonyms.

R. MESSANENSIS, Seguenza. *Mediterranean.*

Subsection CINGULINA, Monts. 1884.

R. CONCINNATA, Jeffreys. Pl. 69, fig. 32.

Imperforate, scarcely rimate, semipellucid, smooth, with remote, very slight incremental striæ, whitish, apex obtuse; whorls 4, convex, with deep suture; aperture nearly circular, outer lip thin.

Length, 1 mill.

Mediterranean Sea.

R. SOLUTA, Phil. Pl. 69, fig. 37.

Scarcely rimate, thin, very smooth; whorls 4, very convex, the last ventricose. Length, 1 mill.

Europe.

R. globosa, Martin, Ms. is a synonym.

Var. ALDERI, Jeffreys.

Somewhat larger and thinner, with a more produced and pointed spire.

Northern Europe.

R. MARIONENSIS, Watson. Pl. 70, fig. 65.

Thin, smooth, narrowly umbilicated, ruddy horny, apex blunt; whorls 5, slopingly flattened, slightly convex, with submargined, slightly impressed suture; lip sharp. Length, 1·85 mill.

Between Marion and Prince Edward Is.

R. PRINCIPIS, Watson. Pl. 70, fig. 66.

Imperforate, rather thick, more or less translucent, white, under a thin, caducous, yellowish epidermis; whorls 5, moderately convex, apex blunt, suture rather deep; lip sharp, patulous.

Length, 2 mill.

Between Marion and Prince Edward Is.

R. AUSTRALIS, Watson. Pl. 70, fig. 67.

Imperforate, thin, smooth, pale horn color, under a thin yellowish epidermis; whorls 5, moderately convex, with slightly impressed suture; lip sharp. Length, 1·85 mill..

Royal Sound, Kerguelen Is.

R. PHILOMELÆ, Watson. Pl. 70, fig. 68.

Minutely rimate, subhyaline, white, shining, apex obtuse; whorls scarcely 5, convexly conical, suture not deep, slightly margined; outer lip sharp, a little patulous below. Length, 1·45 mill.

Off Nightingale Isl., Tristan da Cunha.

R. QUISQUILIARUM, Watson. Pl. 70, fig. 69.

Imperforate, solid, smooth, except a few distant spiral striæ on the base, apex obtuse; whorls 5, convexly conical, suture slightly impressed; lip with a varix. Length, 1·5 mill.

Off Fayal, Azores; 450–500 fms.

R. EDWARDIENSIS, Watson. Pl. 70, fig. 70.

Minutely rimate, rather thick, dull, smooth, ruddy horn color, becoming whitish towards the mouth; whorls 4½, convex, the last tumid; outer lip thin, slightly patulous. Length, 0·75 mill.

Off Prince Edward Isl.; 50–150 fms.

R. SINAPI, Watson. Pl. 70, fig. 71.

Imperforate, rather strong, smooth, reddish horn-color, with blunt apex; whorls 4, rapidly enlarging, convex, suture linear; lip thin. Length, 1 mill.

Royal Sound, Kerguelen Isl.

R. TRIANGULARIS, Watson. Pl. 70, fig. 72.

Umbilicated, smooth, white, apex blunt, suture impressed; whorls 4½, rapidly increasing, convex, base with an angle round the umbilicus; lip thin, slightly patulous. Length, 1 mill.

Ascension Isl.; 420 fms.

R. APICINA, Verrill. Pl. 71, fig. 85.

Narrowly umbilicated, with acute, substyliform apex, striated by growth-lines, smooth, dark brown; nuclear whorls 4, normal whorls 5, convex, suture deeply impressed, last whorl with an indistinct ridge below the periphery. Length, 7·6 mill.

Off New England Coast; 1608 fms.

The animal has rather short, stout, tapering tentacles, and is apparently without eyes.

R. LATIOR, Mighels and Adams. Pl. 71, fig. 92.

Narrowly umbilicated, smooth, pale horn-color, with deep suture; whorls 4, convex, rapidly enlarging; aperture rounded, inner margin with a lamina. Length, 2 mill.

New England.

I am inclined to include in this species *R. robusta*, H. C. Lea, of which a single specimen was obtained at Cape May, N. J.

R. KERGUELENI, Smith. Pl. 71, fig. 3.

Imperforate, thin, vitreous or milk white, light brownish at the apex, polished; whorls 6, convex, apex obtuse, suture very narrowly margined; lip continuous, slightly thickened and expanded. Length, 3 mill.

Kerguelen's Land.

R. NIGRA, Krauss. Pl. 71, fig. 4.

Imperforate, thin, rather smooth, violaceous or greenish black, apex obtuse; whorls 5, convex, with deep suture; lip acute, simple. Length, 1·4 mill.

Algoa Bay, So. Africa.

R. LITTORINIFORMIS, Garrett. Pl. 71, fig. 5.

Smooth, pellucid, shining, white; whorls 5½, very convex, rapidly increasing, suture deeply impressed, slightly margined; peristome rather thick. Length, 2 mill.

Viti Is.

R. HYALINA, Garrett. Pl. 71, fig. 91.

Thin, hyaline, shining, white; whorls 6–7, convex, with very fine, crowded, spiral raised striæ, crossed by more delicate growth lines; whorls 6–7, convex, with deep suture; peristome rather thick, simple, slightly expanded at the base. Length, 6 mill.

Samoa, Viti and Paumotus Is.

R. MELANURA, Tenison Woods. Pl. 71, fig. 7.

Scarcely perforate, solid, somewhat translucent, smooth, shining, suture impressed, dark olivaceous; whorls 5, slightly convex, periphery obtusely angulated; aperture anteriorly produced, lip simple. Length, 2 mill.

Tasmania.

R. ANGELI, Tenison Woods. Pl. 71, fig. 11.

Umbilicated, turbinate conoidal, thin, pellucid, yellowish, with rather sharp crowded growth lines, and thin, slight spiral striæ; whorls 5, with well-impressed suture; aperture rounded, lip thickened. Length, 1·5 mill.

Tasmania.

R. CORIACEA, Manzoni. Pl. 69, fig. 54.

Scarcely rimate, thin, fragile, coriaceous, longitudinally lamellarly striate, light yellowish brown; whorls 6, convex, with deep slightly margined, channeled suture, and rapidly increasing; lip thin, simple. Length, 2·6 mill.

Madeiran Archipelago.

An abberant form.

Subsection PARVISETIA, Monts. 1884.

R. SCILLÆ, Seguenza. Pl. 69, fig. 38.

Translucent, opaline, very smooth, shining, yellowish, sometimes with darker maculations or streaks; whorls 4, convex, the last

whorl inflated, apex obtuse; aperture nearly round, with simple, slightly thickened lip.

Sicily.

The spire outline more convex than in the preceding species.

R. brutia, Tiberi, Ms. has been quoted as a synonym.

R. TIBERIANA, Issel. Pl. 71, fig. 90.

Rimate, pellucid, whitish or yellowish, shining, very slightly longitudinally striulate; whorls 4½, convex, suture impressed, obscurely margined; peristome a little thickened, continuous.

Length, 1·5 mill.

Suez.

R. GLOBULUS, Möller. Pl. 70, fig. 64.

Whorls rapidly enlarging, convex, with deep suture, apex obtuse, hyaline, whitish or yellowish, shining, smooth. Length, 2·5 mill.

Norway, Spitzbergen, Greenland, Gulf of St. Lawrence.

R. GLOBULINA, Monts. (unfigured.) *Sicily.*

Unfigured Species of Setia.

R. PATENS, Gould. *Charleston Harbor, S. C.*
R. TRICINCTA, R. CANDIDA, R. BIFASCIATA, A. Ad. *Japan.*
R. FLAMIA, Beddome. *Tasmania.*
R. BIZONATA, Nevill. *Mauritius.*
R. SIENNÆ, Tenison Woods. = *Hydrobiidæ.*
R. TORCULARIS, Tenison Woods. *Port Jackson, Australia.*
R. GRIEGI, Friele. (Figure inaccessible to me.) *Arctic Seas.*

Subgenus RISSOPSIS, Garrett. 1873.

R. TYPICA, Garrett. Pl. 69, fig. 52.

Thin, hyaline, smooth, glossy, white; whorls 6, flat, suture faintly impressed, margined; peristome rather thin, sinuous, somewhat expanded, columella obliquely arched, slightly callous.

Length, 10 mill.

Viti and Samoa Is.

Subgenus ALVANIA, Risso. 1826.

R. CIMEX, Linn. Pl. 65, figs. 11, 12.

Imperforate, strong, opaque, covered by rounded granules in longitudinal and spiral series, white or light fulvous to chestnut

color, unicolored or bifasciate; lip thick, labiate and sulcate within, white-varicose externally. Length, 6 mill.

Mediterranean Sea.

The synonyms are *R. calathiscus*, Mtg., *R. Boryanus*, Chiaje, *R. cancellata*, Desm., *R. Europea*, Risso, *R. Fremenvillei* and *R. mamillata*, Risso, *R. granulata*, Phil., and vars. *paupercula*, and *depauperata*, Monts.

R. MONTAGUI, Payr. Pl. 65, fig. 15.

Imperforate, thick, spirally lirate, longitudinally strongly ribbed, whitish, yellowish or chestnut color, plain or with one or two bands; whorls 5, suture distinct, subchanneled; aperture white-lipped and sulcate within, with white varix externally. Length, 5 mill.

Mediterranean Sea.

The most striking difference between this and the preceding species is in the prominence of the longitudinal over the spiral sculpture. The synonyms are *R. Sardoa*, Risso, *R. Nicolosiana*, Arad. and Benoit, *R. buccinoides*, Desh. (in part), and *R. Schwarziana*, Brus.

R. CANARIENSIS, d'Orb. Pl. 65, fig. 32.

Imperforate, solid, white, covered with rounded nodules by the intersection of longitudinal and spiral ribs; whorls 5, slightly convex, with rather deep suture, lip thickened and margined.

Length, 1·75 mill.

Madeira, Canary Is., Algiers, Palermo.

R. CALATHUS, Forbes and Hanley. Pl. 65, fig. 30.

Like the last species, but more conical, more rudely sculptured, the longitudinal sculpture more prominent. Length, 4 mill.

Europe.

R. LINEATA, Risso. Pl. 64, figs. 1, 3; Pl. 65, figs. 13, 29.

With strong ribs, becoming obsolete on the base, and numerous spiral liræ, yellowish or fulvous, the liræ forming lines of deeper color; whorls 6, convex, with deep suture; lip thickened externally, plicate within. Length, 4 mill.

Mediterranean Sea.

R. rugulosa, Arad., *R. coronata*, Brusina, *R. lignea* (Thorpe?) Reeve (fig 13), var. *costulosa*, Risso, and *R. Peloritana*, Arad. et Benoit. (fig. 3), are synonyms.

Var. ASPERA, Phil. Fig. 29.

Decussations deeper, giving the nodules a rough appearance.

It is *R. variegata*, Danilo and Sandri, and *R. costulosa*, Schwartz.

R. AREOLATA, Stimpson. Pl. 68, fig. 83.

Clathrate by rather distant, narrow longitudinal and spiral ribs; whorls 7, convex, with deep suture; lip simple. Length, 3·5 mill.

New England.

R. ACUTELIRATA, Carp. Pl. 66, fig. 41.

Thin, brownish ash-color, with about 18 longitudinal, distant ribs, vanishing on the periphery, crossed by distant spiral liræ (15 on last whorl), not nodose; whorls 6, rapidly enlarging, convex, with well-impressed suture. Length, 2·25 mill.

San Diego, Cal.

R. LANCLÆ, Calcara. Pl. 63, fig. 83.

Yellowish, orange brown or yellowish white; longitudinally distantly costate, spirally lirate, forming nodules on the ribs, base without ribs, but spirally striate; whorls 5–6, very convex, suture deep, channeled; lip externally thickened. Length, 4 mill.

Mediterranean Sea.

R. scalra, Monts., and *R. Schwartzii*, Benoit, are synonyms.

R. RETICULATA, Mtg. Pl. 65, fig. 9.

Imperforate, solid, almost opaque, yellowish or yellowish brown, sometimes indistinctly bifasciate, reticulated by numerous, curved, narrow ribs, and very distinct spiral liræ; whorls 6–7, slightly convex, suture narrowly excavated; lip plicate within, with a striated external varix. Length, 4 mill.

Europe.

The synonymy includes *R. textilis*, Phil., *R. Brocchii*, Weink., *R. Beanii*, Forbes and Hanley.

R. FISCHERI, Jeffreys. Pl. 65, fig. 31.

Imperforate, opaque, not shining, reticulated by equal, narrow, distant longitudinal and spiral riblets, light yellowish or whitish; whorls 5, moderately convex, with deep suture; lip rather thin, not varicose, smooth within. Length, 2·5 mill.

Mediterranean Sea, Portugal.

R. JEFFREYSI, Waller. Pl. 66, fig. 56.

Whitish or fulvous, with prominent spiral liræ, decussated by less elevated longitudinal sculpture, which becomes obsolete on the base; whorls 5, convex, subangulate, suture deep, channeled; lip scarcely varicose. Length, 3·5 mill.

North Sea, Mediterranean.

It is *R. sororcula*, Granata.

R. TARSODES, Watson. Pl. 67, fig. 77.

Scarcely rimate, white, with about 20 narrow ribs, fading below the periphery, clathrate by distant, spiral liræ, extending feebly over the base; whorls 5, convex, slightly shouldered, with deep suture; lip feebly varicose. Length, 1·87 mill.

Off Fayal, Azores; 450–500 fms.

R. DIDYMA, Watson. Pl. 67, fig. 76.

Scarcely rimate, strong, dull yellowish, with about 12 strong, narrow, distant longitudinal ribs, fading below the periphery, nodulously clathrate by equal, distant, spiral ribs, with three smaller, closer ones on the base; whorls 5½, with deep suture; lip very thick, subduplicate. Length, 2·15 mill.

Near Culebra and St. Thomas, W. I.; 390 fms.

R. CIMICOIDES, Forbes. Pl. 65, fig. 27.

Solid, opaque, yellowish or fulvous brown, sometimes bifasciate, with rather broad longitudinal riblets, vanishing below, crossed by spiral undulating liræ, forming intersectional nodules; whorls 7–8, somewhat flattened in the middle, the last dilated, suture channeled; lip varicose. Length, 5·5 mill.

Mediterranean Sea to Norway.

It is *R. sculpta*, Forbes and Hanley, *R. intermedia*, Aradas.

R. GERGONIA, Chiereg. Pl. 65, fig. 10.

Solid, fulvous, strongly tuberculated by longitudinal ribs crossed by spiral liræ, the subsutural series strongest and largest; whorls 6, slightly convex, suture not deep; lip plicate within, externally varicose. Length, 3·5 mill.

Mediterranean Sea.

R. Mariæ, Bucq. Dautz. Doll. (not Orb.), is a synonym.

R. LUSCINIÆ, Watson. Pl. 67, fig. 79.

Imperforate, glossy, yellowish white, with about 16, low, rounded, distant ribs, nearly obsolete on the last whorl, crossed by rather closer, equally strong, revolving ribs, which continue to the base, intersections slightly nodulous; whorls 5, convex, with deep suture; lip varicose. Length, 2·25 mill.

Nightingale Isl., off Tristan da Cunha; 100 to 150 fms.

R. SUBCRENULATA, Schwartz. Pl. 64, fig. 2.

Rather solid, shining, subhyaline, white, with strong longitudinal ribs and scarcely smaller spiral liræ, the intersections distinctly

tuberculated; lip prominently, denticulately varicose externally.

Length, 3 mill.

Mediterranean Sea.

It is *R. Oceani*, Arad. and Benoit, *R. granulata*, Requien, and *R. crenulata*, Var. *minor*, Phil.

R. SCABRA, Phil. Pl. 63, fig. 84.

Longitudinally plicate, obsolete below, spirally lirate, forming mamillary tubercles; whorls 6, slightly convex; white, maculated with chestnut; lip sulcate within, varicose externally.

Length, 3 mill.

Sicily.

It is *R. mutabilis*, Schwartz. Ms.

R. HISPIDULA, Monts. Pl. 66, fig. 38.

Rather solid, brownish, regularly clathrate by longitudinal narrow riblets and more numerous spiral liræ; lip plicate within, externally dentately varicose; whorls 6, moderately convex.

Length, 3·75 mill.

Mediterranean Sea.

It is *R. clathrata*, Phil.

R. SUBAREOLATA, Monts. Pl. 65, fig. 25.

Imperforate, translucent, brownish, subclathrate by longitudinal riblets crossed by spiral liræ; whorls 5, convex, with deep suture; columella arcuate, basal area cingulate, lip thickened externally.

Length, 3 mill.

Sicily and Algiers.

It is *R. Caribœa*, Monts. *R. costulata*, S. Wood. *R. Stefanisi*, Jeffreys.

R. LEACOCKI, Watson. Pl. 65, figs. 33, 34.

Minutely rimate, solid, translucent, yellowish white, with two chestnut bands, white between them, with 15–18 strong oblique ribs, and equally strong spiral ribs, forming rather large, close nodules; whorls 5–6, somewhat conically flattened, suture distinct; lip varicose. Length, 2·6 mill.

Madeira.

R. CARIBÆA, d'Orb. Pl. 66, fig. 57.

Shell imperforate, thick, white, with two chestnut bands, strongly, closely nodulous, with spiral ribs at the base; whorls 5, convex, with rather narrow suture; lip thick. Length, 2 mill.

West Indies.

Closely related to the preceding species. *R. corilea*, d'Orb. of Reeve's Icon. is a misprint for this species.

R. INTERFOSSA, Nevill. Pl. 66, fig. 50.

Somewhat solid, light fulvous, with three spiral rows of granules on the penultimate, five on the last whorl, and two spiral ribs at the base; whorls 6, somewhat shouldered, with deep suture; lip thickened. Length, 2 mill.

Indian Ocean.

R. ELEGANS, Angas. Pl. 66, fig. 46.

Imperforate, rather solid, whitish, closely nodose, in three (on the last whorl four) spiral series; whorls 5, angularly convex, with deep suture; lip varicose. Length, 2·5 mill.

Port Jackson, Australia.

R. GRACILIS, Angas. Pl. 66, figs. 47.

Imperforate, moderately solid, light purplish brown; whorls 5, convex, ribbed as far as the periphery of the last whorl, strongly spirally lirate throughout, intersections beaded; peristome thickened. Length, 2·5 mill.

Port Jackson, Australia.

R. STIGMATICA Frauenf. Pl. 66, fig. 42.

Imperforate, thick, subpellucid, white, with 16–17, longitudinal, rather close, rounded ribs, crossed by spiral liræ—which continue to the base, whilst the former there become obsolete; whorls 5½, flattened convex, with moderate suture; lip varicose.

Length, 2 mill.

Kamorta, Nicobar Is.

R. FENESTRATA, Krauss. Pl. 66, fig. 40.

Imperforate, white, clathrate by distant longitudinal and spiral narrow ribs; whorls 7, convex, rapidly enlarging, with deep suture; lip with about 15 minute internal teeth. Length, 3 mill.

Cape of Good Hope; on byssus of Pinna.

R. CRYSTALLINA, Garrett. Pl. 63, fig. 78.

Shell thin, subpellucid, shining, vitreous, white, with small, flexuously oblique, distant longitudinal ribs, evanescent below, and close spiral liræ; whorls 5, convex, with deep suture, lip thickened. Length, 2 mill.

Viti Isles.

Unfigured Species of Alvania.

R. CARPENTERI, Weink. *Vancouver's Isl.*
Is *R. reticulata*, Carp. (not Montagu).
R. FILOSA, Carp. *Vancouver's Isl.*
R. PURPUREA, Dall. *Monterey, Cal.*
R. PERLATA, Mörch. *West Coast Central America.*
R. AEMULA, Monts. *Messina, Sicily.*
R. MARIONÆ, Monts. *Toulon, France.*
R. BADIA, R. CIRCINNATA, R. CLATHRATULA, R. CONCINNA, R. FERRUGINEA, R. MARIELLA, R. SCITULA, R. SEMICOSTATA, R. TIARULA, all of A. Adams. *Japan.*
R. FASCIATA, Tenison Woods. *Tasmania.*
R. FUSCA, R. FENESTRATA, R. GUADRATA, Gould. *China Sea.*
R. ACUMINATA, Gould. *Bonin Is.*
R. PURA, Gould. *Simoda, Japan.*
R. BAYNTONI, Beddome. *Tasmania.*

Section ACINOPSIS, Monts. 1884.

R. CRENULATA, Mich. Pl. 65, fig. 14.

Imperforate, solid, opaque, yellowish white, tinted and indistinctly bifasciate with chestnut, spire mucronate; longitudinally broadly ribbed, strongly spirally lirate, the intersections forming strong rounded tubercles; whorls 6–7, convex, the suture widely channeled; aperture expanded, brownish red and sulcate within, subcanaliculate below, lip crenulately varicose exteriorly, columella tuberculated anteriorly. Length, 5 mill.

Europe.

It is *R. cimex*, Donovan, *R. cancellata* (Da Costa?) Jeffreys, and *R. verrucosa*, Risso.

R. HIRTA, Monts. Unfigured. *Mediterranean Sea.*

Section MASSOTIA, Bucq. Dautz. Dollf. 1884.

R. LACTEA, Mich. Pl. 66, fig. 51.

Thin, subtranslucid to opaque, feebly longitudinally and spirally closely costellate, yellowish white or white; whorls 5–6, subconvex, with linear suture, lip scarcely thickened externally.

Length, 6 mill.

Mediterranean Sea, Portugal.

R. cancellata, Petit is a synonym.

Section NEVILLIA, A. Ad. 1868.

R. PICTA, H. Adams. Pl. 66, fig. 53.

Imperforate, rather solid, with unequal spiral ribs, of which the one on the middle of each whorl is strongest, and minutely longitudinally striate; whitish, maculated with chestnut; whorls 5½, angulated, with distinct suture; columella callous, with an anterior tooth, lip acute, smooth within, varicose externally.

Length, 2·25 mill.

Mauritius.

R. LUCIDA, H. Adams. Pl. 66, fig. 54.

Rather solid, imperforate, subpellucid, white, with subdistant spiral riblets, and very minute longitudinal striæ; whorls 5, convex, with impressed suture; columellar tooth and external varix strong.

Length, 2 mill.

Mauritius, Isle of Bourbon.

Section ALVINIA, Monts. 1884.

R. WEINKAUFFI, Schwartz. Pl. 66, fig. 48.

Imperforate, thin, subpellucid, a little shining, whitish or yellowish, clathrate by longitudinal riblets, and much stronger, distant spiral ridges; whorls 6, convex, angulated, shouldered, with deeply incised suture; aperture smooth within, slightly varicose externally.

Length, 3 mill.

Sicily and Algiers.

R. dictyophora, Weink. is a synonym.

R. DICTYOPHORA, Phil. Pl. 66, fig. 49.

Thin, hyaline, dark brown or fulvous, with distant thin longitudinal, and stronger, more distant spiral liræ, two of the latter in the penultimate and five in the last whorl; perforate; lip thin.

Length, 2 mill.

Sicily.

R. PAGODULA, Bucq. Dautz., Dollf. Pl. 66, fig. 55.

Imperforate, rather solid, turrited, longitudinally ribbed, spirally strongly ridged, the upper ones forming tubercles; whorls 6, subcarinate, shouldered, suture deep; aperture margined. Length, 2 mill.

Mediterranean Sea.

It is *R. Philippiana* and Var. *bivittata*, Jeffreys, *R. scabriuscula*, Req. *R. Lanciæ*, Mts. and *R. tessellata*, Schwartz.

R. CHEILOSTOMA, Tenison-Woods. Pl. 68, fig. 91.

Imperforate, solid, dull, yellowish, clathrate by longitudinal and spiral ribs, the former vanishing about the periphery, the latter

continued, and more conspicuous on the base; whorls 7, with deep, lirate suture, aperture conspicuously bilabiate. Length, 3 mill.

Tasmania.

R. MAURITIANA, Martens. Pl. 66, fig. 35.

Rather thick, white, strongly, rather closely, longitudinally ribbed throughout, crossed by spiral ridges, forming spiral series of nodules, of which there are two on the penultimate and five or six on the last whorls; whorls 4½, convex; peristome thickened, simple.

Length, 1·5 mill.

Mauritius.

R. VENUSTA, Garrett. Pl. 68, fig. 90.

Shell imperforate, solid, vitreous, shining, white, with strong compressed spiral ridges, of which there are 5 on the body whorl and 2 on the spire, crenulated by close, less conspicuous, longitudinal, rounded riblets; whorls about 7, convex, with deep, margined suture; lip very thick, varicose. Length, 3·5 mill.

Viti Is.

Section GALEODINA, Monts. 1884.

R. STRIATULA, Montagu. Pl. 66, fig. 58.

Rather solid, opaque, yellowish white, thinly longitudinally striate in the interstices between much stronger spiral ridges, which carinate and shoulder the whorls; aperture a little dilated below, smooth within, ridged-varicose externally. Length, 4·5 mill.

Europe.

R. Russinoniaca, Locard, *R. labiata*, Phil. *R. trochlea*, Mich., and *R. carinata*, Da Costa. are synonyms.

R. CONSOCIELLA, and R. ELECTA, Mts. (Unfigured). *Mediterranean.*

Section THAPSIELLA, Fischer. 1884.

R. RUDIS, Phil. Pl. 66, fig. 59.

Hyaline, sometimes faintly strigate with chestnut, spirally striate, spire and upper part of body whorl longitudinally, rather faintly costate; whorls 6½, somewhat convex; lip simple, plain within and without. Length, 2·6 mill.

Mediterranean Sea.

P. FREMENVILLEI, Audouin. Pl. 67, fig. 66.

Imperforate, shining, white, with longitudinal subdistant ribs, fading out on upper part of body whorl, closely spirally striate

throughout; whorls 7, convex, with deep suture; lip simple, continuous.

Suez.

Section ACTONIA, Monts. 1884.

R. TESTÆ, Arad. and Maggiore. Pl. 66, figs. 60, 61.

Somewhat solid, transparent, whitish, with distant thin plicæ, vanishing towards the base, subcancellated by less elevated, distant, spiral liræ; whorls 6, somewhat convex, with deep suture; aperture effuse below, lip acute, smooth within, externally varicose.

Length, 3–4 mill.

Norway to Mediterranean; deep sea.

R. abyssicola, Var. *coniformis*, and *R. asperula*, Brugn. are synonyms.

Var. ABYSSICOLA, Jeffreys. Fig. 61.

Shorter, sculpture less distinct.

R. SUBSOLUTA, Aradas. Pl. 66, fig. 62.

Somewhat solid, white or brownish, opaline, thinly, rather numerously longitudinally costulate, riblets vanishing on lower part of body whorl, with less prominent, close, spiral striæ, stronger at the base; whorls 5, convex, with deep suture; aperture expanded below, externally varicose. Length, 2 mill.

Europe, abyssal.

It is *R. elegantissima*, and Var. *major*, Seguenza, *R. abyssicola*, Var. *obtusa*, Jeffreys. and *R. abyssicola*, Sars.

Unfigured doubtful and spurious species described as Rissoæ.

R. PULCHELLA, R. LINEATA, R. LAYARDI, R. APPROXIMATA, R. DUBIA, R. DIEMENENSIS, R. BICOLOR, and R. BADIA, Petterd. *Tasmania.*

R. AGNEWI, Tenison Woods. *Tasmania.*

R. GRACILIS, A. Ad. *Suez.*

R. (GONIOSTOMA) procera, A. Ad. *Gulf of Pechili, China.*

R. (GONIOSTOMA) pupiformis, A. Ad. *Japan.*

The section Gomiostoma has neither been described nor figured.

R. PAPUANA, Tapparone-Canefri. *Papuan Is.*

R. BELLA, R. ELEGANS, A. Ad. *Philippines.*

R. ARATA, R. RUFA, R. SOLIDULA, Phil. *Guinea, W. Africa.*

R. UMBILICATA, Phil. *China.*

R. Scythei, Phil. *Sts. of Magellan.*
R. lævigata, R. mucronata, R. tuberculata, R. truncata, Menke, R. scrobiculata, Möll. *Greenland.*
R. gradatula, R. emaciata, Mörch. *West Indies.*
R. crassicosta, R. eulimoides, R. aberrans, A. Ad. *Jamaica.*
R. incompta, Gould. *Florida.*
R. Gentilissiana, Sowb. (Pl. 68, fig. 5).
= *Hydrobia Gentilsiana*, Crosse.
R. bicingulata, and R. tenuicostata, Seguenza. *Messina.*
R. Boscii, Payr. *Corsica.*
R. punctum, Cantraine. *Mediterranean.*
R. Weyville-Thompsoni, Jeffreys. *Arctic Ocean.*
R. pedicularis, Menke. *Heligoland.*
R. præusta, Recluz. *Toulon.*
R. substriata, and R. exigua, Phil. *Sicily.*
R. dilecta, Monts. *Sicily.*
R. scalaris, Mich. = *Truncatella.*
R. Gougeti, Mich. *Senegal.*
R. elongata, R. excavata, Phil. = *Odostomia.*
R. eximia, Jeffreys. = *Odostomia.*
R. Cooperi, Tryon. = *Amnicolidæ.*

Genus RISSOINA, d'Orb. 1840.

Section Rissoina (sensu stricto).

R. Inca, d'Orb. Pl. 55, fig. 15.

Strong, stout, with about 17 elevated, suboblique, flexuous, longitudinal ribs, and fine spiral striæ, more prominent on the base; whorls 7–8, nearly flat, suture crenulated; rosy white.

Length 8·2 mill.

Bolivia, Peru.

R. pyramidalis, A. Ad. Pl. 55 fig. 16.

Solid, dirty white, longitudinally obliquely plicate, spirally striate, whorls 8, flattened, suture crenulated. Length, 8·5 mill.

Philippines.

R. assimilis, Jickeli. Pl. 68, fig. 15.

Shell solid, white, with 10–11, straight, narrow, longitudinal costæ, and much wider interstices, which show slight, distinct spiral striæ; whorls 8, slightly convex, with impressed suture; lip scarcely varicose. Length, 8·3 mill.

Red Sea.

R. CONIFERA, Schwartz. Pl. 55, fig. 30.

Somewhat solid, subpellucid, shining, white, with 12–14 rounded, subdistant, straight longitudinal ribs, the interstices closely spirally striated below; whorls 6–7, turrited, suture crenulated; lip varicose.

Length, 5·4 mill.

Mauritius.

Described by Schwartz and referred to *R. conifera*, Montagu, a lost species which is more likely to have been a *R. Bruguieri*. Weinkauff erroneously quotes it as *R. coniformis* and gives it the new name *R. Montagui*.

R. FASCIATA, A. Ad. Pl. 55, figs. 17, 18.

Solid, chestnut color, with a central pale band, distantly obliquely, subflexuously plicate, closely spirally striate; whorls 8, somewhat convex, with impressed, crenulated suture. Length, 6·8 mill.

Sydney, Australia.

R. Smithii, Angas, (fig. 18) is a synonym.

R. BRUGUIERI, Payr. Pl. 55, figs. 19, 22.

Solid, white or yellowish white, with about 16 flexuous, longitudinal plicæ, crossed by strong spiral striæ; whorls 7–8, a little convex, suture plane, somewhat undulated; varix ridged.

Length, 7·6 mill.

Mediterranean Sea.

R. Poliana and *R. reticulata*, Risso, and *R. decussata*, Menke are synonyms; and *R. striolata*, Risso (fig. 22) may probably be added.

R. HANLEYI, Schwartz. Pl. 55, fig. 21.

Strong, shining, milk white, with two orange-brown bands, with 22–24, close, subsinuous, low, longitudinal plications, and close, numerous spiral striæ, the sculpture evanescent on lower part of body whorl; whorls 7, slightly convex, with impressed suture; lip thickened, scarcely varicose. Length, 7·3 mill.

Philippines; *Sydney, Australia.*

R. VARIEGATA, Angas. Pl. 56, figs. 43–46.

Varies greatly in coloring as well as in the development of its sculpture. I think that the figures which I have copied from the Conch. Icon. are from worn specimens, as they do not exhibit the sculpture to the same extent as Angas' originals, the description of this species is not unlike that of *R. Hanleyi*, and it will probably prove identical with it.

Sydney, Australia.

R. MONILIS, A. Ad. Pl. 55, fig. 23.

Solid, light fulvous, with a sutural row of nodules, and close, narrow, longitudinal plications, the interstices spirally punctate-striate; whorls 7, flattened; varix striate. Length, 4·9 mill.

Philippines.

R. KREBSI, Mörch. Pl. 54, fig. 7.

Semipellucid, white, with about 28 thin, subsinuous, longitudinal riblets, cut into a row of tubercles just below the suture, decussated by spiral, close striæ; whorls 7, convex, with slightly impressed suture; lip varicose. Length, 3·5 mill.

Cuba, Jamaica.

Schwartz has described and figured this as *R. multicostata*, Ads.

R. MICANS, A. Ad. Pl. 55, fig. 28.

Rather solid, white, shining, subdistantly, elevately plicate, interstices spirally striate, last whorl sulcate below; whorls 9, convex; lip varicose. Length, 4·7 mill.

Philippines.

R. FORTIS, C. B. Ad. Pl. 55, fig. 25.

White, with 22 rather strong, rounded, nearly straight, longitudinal ribs; whorls 10, somewhat turreted, flattened, with crenulated, rather deep suture; lip strongly varicose. Length, 7·4 mill.

Panama to *Cape St. Lucas.*

R. STRICTA, Menke. Pl. 55, fig. 26.

White, densely, smoothly longitudinally costate, the interstices obsoletely spirally striate; whorls 7, flattened. Length, 7 mill.

Mazatlan.

Very closely allied to the preceding species, if not identical with it.

R. AMBIGUA, Gould. Pl. 55, figs. 31, 27, 29, 35; Pl. 54, fig. 7.

Whitish, with about 20 narrow, small, longitudinal plications, often becoming faint on the last whorl, closely spirally striate; whorls about 10, flatly convex, with impressed suture; lip varicose. Length, 7·3 mill.

Aden, Ceylon, Singapore, Paumotus, Sandwich Isl., Mauritius, Viti Is., etc.

It is *R. pusilla*, Schwartz, not Brocchi (fig. 27), *R. cincta*, Dunker, *R. myosoroides*, Recluz (fig. 29), *R. striolata*, Dunker, *R. multicostata*, Garrett (fig. 9) *R. costulifera*, Pease, *R. subconcinna*, Souverb. (fig. 35) and var. *perpusilla*, Nevill.

R. Woodwardi, Carp. Pl. 56, fig. 72.

Whitish, with 12–14, narrow plicæ, and wider interstices, which are longitudinally, not spirally striated; whorls 7–8, subplanate, suture impressed. Length, 3 mill.

Mazatlan.

The unfigured *R. clandestina*, C. B. Ad. has been referred here; if identical, it will take precedence.

R. costulata, Pease. Pl. 55, fig. 32.

White, with a central chestnut band, prominently longitudinally ribbed, spirally striate; whorls plano-convex, with channeled suture. Length, 5 mill.

Paumotus Is.

R. incerta, Souverb. Pl. 55, figs. 34, 33.

Solid, subulate, white, with or without a spiral chestnut band, obliquely. strongly, longitudinally 12–13 ribbed, interstices with crowded spiral striæ, most conspicuous anteriorly; whorls 10, slightly convex, with deep suture; lip strongly varicose. Length, 8·5 mill.

New Caledonia, Viti and Samoa Is.

The latter localities are for *R. terebra*, Garrett, (fig. 33) which appears to be identical.

R. debilis, Garrett. Pl. 56, fig. 48.

White, with small slightly oblique, rounded ribs, fading anteriorly, interstices finely striate spirally, the striæ continuous and more distinct on lower part of body whorl; whorls 8, convex, with deep suture; peristome varicose externally. Length, 4·5 mill.

Viti Is.

R. Nevilliana, Weink. Pl. 55, figs. 37, 38.

Whitish, indistinctly yellow banded, somewhat shining, with strong, longitudinal, unequal costæ, and very light spiral striæ; whorls more than 8, angulated, with very deep suture; lip subvaricose. Length, 13 mill.

Near Hong Kong, China.

R. Gertrudæ, Tenison Woods. Pl. 55, fig. 39.

Rather thin, translucent, milk-white, with small, rounded, subobsolete longitudinal plicæ, slightly spirally striate towards the base; whorls 8, somewhat convex, suture broadly margined; lip dilated in the middle, thickened; base rimate. Length, 4·5 mill.

King's Island, Tasmania.

R. SPIRALIS, Souverb. Pl. 55, fig. 40.

Whitish, longitudinally costate, with equal interstices which are slightly spirally striate, base of body-whorl decussated by spiral sulcations; whorls 9, slightly convex, with impressed suture; lip continuous, externally thickened. Length, 5 mill.

New Caledonia.

R. COSTATOGRANOSA, Garrett. Pl. 55, fig. 41.

Solid, shining, ashy white, longitudinally closely, somewhat obliquely flexuously, granosely ribbed, spirally closely grooved; whorls 9, convex, with deep suture; lip thick, finely crenulated, somewhat dilated. Length, 5 mill.

Viti Isles.

R. TRIANGULARIS, Watson. Pl. 54, fig. 12.

White, with 12–13, low, distant, oblique, flexuous longitudinal ribs, and much wider shallow furrows, narrowly spirally striate throughout; whorls 8, convex; pillar lip long, oblique, outer lip varicose, aperture expanded below. Length, 3·75 mill.

Cape York, N. E. Australia.

R. GRACILIS, Garrett. Pl. 55, fig. 42.

Rather thick, somewhat shining, light brown, with rather large, closely set, slightly oblique longitudinal ribs and equal interspaces, ribs flexuous on lower part of body whorl; whorls 9, flatly convex, with margined suture; lip thick, sinuous above and below.

Length, 3 mill.

Viti and Society Is.

R. TEREBROIDES, E. A. Smith. Pl. 54, fig. 6.

Whitish, with a median chestnut zone, with 11–12 arcuate, strong, longitudinal costæ, very minutely spirally striate, ribs fading below; where the striæ are stronger, whorls about 10, moderately convex; lip broadly, strongly varicose. Length, 8·5 mill.

San Christoval, Solomon Is.

R. LIRATA, Angas. Pl. 54, fig. 10.

Rather thin, dull milky white, with regular, thin, flexuous longitudinal ribs, becoming obsolete below, where numerous, very fine, close-set spiral striæ are visible; whorls 7, slightly convex; outer lip thickened, varicose. Length, 4 mill.

So. Australia.

R. HONOLULUENSIS, Watson. Pl. 54, fig. 13.

White, with 15 subcontinuous, narrow, straight longitudinal ribs, and much wider interspaces, finely, microscopically spirally striate,

striæ more distinct on the base; whorls 6, besides the embryonic, flatly convex; lip thick, externally varicose. Length, 3·5 mill.

Sandwich Islands.

R. SUBVILLICA, Weinkauff. Pl. 56, fig. 54; Pl. 68, fig. 100.

Whitish, with strong, rounded longitudinal ribs, replaced by spiral riblets below the middle of the body whorl; whorls 11, swollen, turreted. Length, 15 mill.

Loochoo Is.

Figured in Conch. Icon. as *R. villica*, Gould, (fig. 100).

R. COSTULATA, Dunker. Pl. 57, fig. 90.

Shell strong, whitish, rather yellowish below, with about 14 longitudinal suboblique ribs; whorls 8, slightly convex; aperture channeled below, lip thickened. Length, 5 mill.

Japan.

Unfigured and doubtful Species.

R. WOOD-MASONIANA, Nevill. *Andaman Is.*
R. INDICA, Nevill. *Paumben Sts., So. India.*
R. EFFUSA, Mörch. *West Coast of Centr. America.*
R. FIRMATA, C. B. Ad. *Panama.*

The shell figured by Schwartz for this species and copied by Küster is a very doubtful identification, as is that of *R. scalariformis*, C. B. Ad. which Carpenter declares to be a young shell of *R. firmata*, from an examination of Adams' type specimens. Sowerby, in Reeve's "Iconica," places *R. firmata* in the synonymy of *R. Woodwardi*, Carp.

Section RISSOLINA, Gould. 1861.

R. ELEGANTISSIMA, d'Orb. Pl. 56, fig. 51.

Thick, yellowish white, with close, rounded, longitudinal ribs, cut into a row of nodules next the suture, spirally very thinly striate; whorls 8, rather flat, suture excavated; lip thick, varicose.

Length, 3·5 mill.

West Indies.

R. multicostata, C. B. Ad. is possibly identical.

R. DUBIOSA, C. B. Ad. Pl. 56, fig. 52.

Solid, subpellucid, whitish or yellowish, with about 18–20, straight, elevated longitudinal ribs, scarcely spirally striate; whorls 7–8,

flatly convex, subturreted, with impressed, undulated suture; lip varicose. Length, 5 mill.

West Indies.

It is *R. Dunkeri*, Pfr. teste Weinkauff.

R. DISTANS, Anton. Pl. 56, fig. 56.

Solid, white, shining, with 12 strong, rounded, longitudinal ribs, the interstices scarcely striate; whorls 7, slightly convex, suture undulated; lip varicose. Length, 9 mill.

Philippines.

R. canaliculata, Schwartz is a synonym.

R. PLICATA, A. Ad. Pl. 56, fig. 58–60, 68; Pl. 54, fig. 8,

Whitish, strongly, but narrowly, distantly plicate, the shallow, concave interstices spirally striate; whorls 8, subangulated above and below the suture, the sides flattened; lip somewhat varicose. Length, 5·6 mill.

Philippines, Red Sea, Mauritius.

The synonymy includes *R. scalariformis*, Schwartz, not C. B. Ad. (fig. 68), *R. Bertheloti*, Audouin, *R. denticulata*, Mohrenstern (fig. 59), and *R. scalarina*, A. Ad. Reeve's figure of the latter species (fig. 8). is a very poor one, evidently. Probably *R. subangulata*, Schwartz, (fig. 60) is also to be added to the synonymy of the present species, as the chances are that it is not properly identified by Schwartz as Adams' species and the differential characters are of little or no importance.

R. subangulata, C. B. Ads. is a Jamaica species, and unfigured.

R. ANGULATA, Jickeli. Pl. 56, fig. 50.

Rather solid, white, a little shining, longitudinally costate, costæ sinuate in the middle, thickened above and below, with two scarcely conspicuous spiral ribs at the base; whorls 6?, suture undulated; lip obtuse. Length, 2 mill.

Red Sea.

R. BURDIGALENSIS, d'Orb. Pl. 56, fig. 53.

With about 12 longitudinal ridges, and much wider, shallow, concave interstices, spirally lirate, fimbriating the tops of the ridges; whorls 7–8, subscalariform, somewhat shouldered or turreted, suture undulated; lip with striate varix. Length, 7·3 mill.

Fossil in the Vienna Basin, etc.; living at Mauritius.

The identification of d'Orbigny's fossil with the recent species is on the authority of Schwartz.

R. OBELISCUS, Recluz. Pl. 54, fig. 9.

Solid, white, a little shining, semipellucid, with 12–13 strong, elevated costæ, cutting the basal rib into tubercles, thinly, closely spirally striate; whorls 8–9, turreted, with deep, undulating suture; lip strongly, nodosely varicose. Length, 4·5 mill.

Mauritius, Upolu.

It is *R. Schwartziana*, Dunker (from the latter locality.)

R. COSTATA, A. Ad. Pl. 56, fig. 57.

Opaque, solid, white, with strong, elevated, longitudinal ribs, subangulated above, closely spirally striate; whorls 7, flatly convex, suture undulated; columella subtuberculate below, lip subdilated, flexuous, strongly varicose. Length, 4·7 mill.

Cobija, Peru; *Philippines.?*

R. BAXTERIANA, Nevill. Pl. 56, fig. 75.

Solid, shining, white, with close, large, rounded longitudinal ribs, constricted into three spiral series of nodules, base spirally sulcate; lip thick, but scarcely varicose. Length, 3 mill.

Red Sea.

Weinkauff suggests that this is the juvenile of *R. nodicincta*, A. Ad., but I scarcely think so.

R. SUBDEBILIS, Nevill. Pl. 55, fig. 36; Pl. 56, fig. 55.

Shell solid, whitish, with about 14 compressed, suboblique ribs and slight spiral striæ, the ribs abruptly terminated by two or three basal spiral riblets; whorls about 12, slightly convex, suture subchanneled. Length, 6·5 mill.

Mauritius.

It is *R. canaliculata*, Sowb. (fig. 55). Nevill, who has indicated a var. *perlanceolata*, thinks this may = *R. debilis*, Garrett.

R. WEINKAUFFIANA, Nevill. Pl. 56, fig. 61.

Rather solid, brownish white, with narrow, rather close, subflexuous ribs, and numerous, less distinct spiral striæ, base very indistinctly doubly ridged; lip smoothly varicose. Length, 6·75 mill.

Andaman Is.

It is not unlikely that this will prove identical with the preceding species. In the original figure the ribs are shaded and the interstices left light, an error which has been carefully copied in my illustration.

R. MINUTA, Nevill. Pl. 56, fig. 65.

Shining, white, with longitudinal, thick, slightly oblique, somewhat irregular ribs, and smooth interstices; whorls 8, angularly

turreted, last whorl with a basal spiral row of prominent granules; lip thickened. Length, 2·5 mill.

Andaman Is.

R. SCOLOPAX, Souverb. Pl. 56, fig. 66.

Narrowly, longitudinally costate, costæ subflexuous, ending below in a narrow, nodose, spiral, basal rib, no spiral striæ, white; whorls about 10, subconvex, with moderately impressed suture; aperture a little extended anteriorly, lip subacute. Length, 12 mill.

Loyalty Group, New Caledonia.

R. FUNICULATA, Souverb. Pl. 56, fig. 69.

White, with nearly straight longitudinal ribs and about equal interspaces, terminating below in a spiral rib, and without spiral striæ; lip varicose. Length, 6 mill.

Ins. Art, New Caledonia.

R. SUBFUNICULATA, Nevill. Pl. 56, fig. 64.

Shell solid, opaque, whitish, with large, rounded, close longitudinal ribs, and no spiral striæ, base with a spiral rib and two liræ; whorls 9, somewhat convex, with deep, crenulated suture; lip thick, varicose, crenulated below. Length, 4 mill.

Persian Gulf to Singapore.

R. TURRICULA, Pease. Pl. 56, fig. 63.

Rather solid, shining, white, with flexuous, rather close, rounded longitudinal ribs, the interstices lightly striate, base granulosely spirally costate and bilirate; whorls 8½, suture undulated; columella truncate below, outer lip varicose. Length, 3 mill.

Sandwich and Viti Is., Ceylon, Mauritius.

Nevill has described a var. *Ceylonica*, which does not appear, from the description, to possess distinctive features.

R. PLICATULA, Gould. Pl. 56, fig. 62.

Whitish, with about 15 straight, longitudinal ribs, crossed by cut lines, and a spiral basal rib; lip thickened. Length, 6 mill.

Bonin and Loochoo Is., China, Indian Ocean.

Weinkauff suspects that this should be united with *R. plicata*, A. Ad.; this may be so, but a comparison of figures of the two species shows differences as great as are usually accepted for specific in this group.

R. FIMBRIATA, Souverb. Pl. 68, fig. 3.

Solid, white, rather closely longitudinally costate, base spirally tubercularly costate; whorls 10, planoconvex, suture undulated; lip fimbriately varicose. Length, 6·5 mill.

Ins. Art, New Caledonia.

R. RISSOI, Audouin. Pl. 57, fig. 78; Pl. 55, fig. 20; Pl. 68, fig. 6.

White, longitudinally flexuously costate, with wider intervals, base with a spiral rib, and no other spiral sculpture; whorls 9, somewhat convex; lip varicose. Length, 6·5 mill.

Red Sea, Australia.

The latter locality is for *R. crassa*, Angas (figs. 20, 6), which is a synonym.

R. INFRASTRICTA, Garrett. Pl. 68, fig. 89.

Thick, shining, white, with a few large, longitudinal ribs, no spiral sculpture; whorls 5, strongly convex, restricted at the base and slightly so at the suture; lip varicose. Length, 2 mill.

Viti Is.

R. MERCURIALIS, Watson. Pl. 54, fig. 14.

White, with about 15 narrow, rounded, subflexuous ribs, continuous from whorl to whorl, terminating in a large funicular spiral rib below, the interstices finely, slightly, spirally striate, three of the striæ at the base stronger; whorls 8½, slightly convex, with moderate suture; lip varicose. Length, 4 mill.

Cape York, Australia.

R. SCALARIFORMIS, Watson. Pl. 54, fig. 11.

White, with 12–13 narrow longitudinal, flexuous ribs and much wider furrows, with scarcely visible spiral striæ, base with a stout spiral funiculum; lip varicose. Length, 2·5 mill.

Honolulu, Sandwich Is.

R. DUCLOSI, Montr. Pl. 56, fig. 49.

White, a little shining, longitudinally, obliquely, subdistantly costate, the costæ less distinct on the lower whorls, nodosely funiculate and finely spirally striate below; whorls 8–8½, planoconvex, with moderately impressed suture; lip acute, varicose.

Length, 5 mill.

Ins. Art, New Caledonia.

R. GRADATA, d'Orb. Pl. 68, fig. 84.

Shell pupoidal, strong, white, longitudinally, obliquely, undulately costate, base with several spiral riblets; whorls 6, turreted, suture undulated, channeled; peristome thick. Length, 2 mill.

Jamaica.

Described as a Rissoa, but appears to be more nearly related to this group.

Unfigured Species.

R. TORNATILIS, Gould. *Loochoo Is.*
R. LYRATA, Gould. *Japan.*
R. MONILIFERA, Nevill. *Japan.*
R. SUBANGULATA, C. B. Ad. *Jamaica.*

Section MICROSTELMA, A. Ads. 1863.

R. DÆDALA, A. Ad. Unfigured. *Japan.*
R. CONCINNA, A. Ad. Unfigured. *Suez.*

This species is said to be a young shell, broken and worn, and to = *R. spirata*, Sowb.

Section SCHWARTZIELLA, Nevill. 1884.

R. BRYEREA, Mtg. Pl. 56, figs. 67, 71.

Solid, subpellucid, shining, white, with about 18–22 longitudinal slightly flexuous costæ and equal smooth interstices, no spiral striæ; whorls 7, suture a little undulated; lip with a longitudinally striate varix, rounded below. Length, 5·5 mill.

Cuba, Jamaica.

First described, erroneously, as British. It is *R. nitens*, and *R. lactea*, Brown. Probably *R. scalarioides*, C. B. Ad., is a synonym, but the figure of that species given by Sowerby in Conch. Icon. (fig. 71), is certainly different, and looks more like a worn *Scalaria lineata*, Say.

R. NIVEA, A. Ad. Pl. 55, fig. 24.

Subpellucid, white, shining, subdistantly, elevately, flexuously plicate, obsolete anteriorly where the whorl is spirally striate; whorls convex; lip thickened, but scarcely varicose.

Length, 3·7 mill.

Port Lincoln, Australia.

R. PSEUDOBRYEREA, Nevill. Pl. 56, fig. 70.

Shell solid, white, with strong, wide, straight longitudinal ribs, crossed by narrow, slight spiral striæ; whorls 8, flattened, a little round-shouldered, suture distinct; lip varicose. Length, 5·5 mill.

Red Sea.

It is *R. bryerea*, Schwartz in part.

R. Chesnelii, Mich. Pl. 56, figs. 73, 74.

White, shining, semipellucid, with about 14, subsinuous longitudinal costæ, and about equal interstices which are scarcely spirally striate; whorls 8, a little convex, suture well-impressed, a little undulated; lip with a strong, wide varix. Length, 3·6 mill.

Florida, West Indies.

The synonyms are *R. Catesbyana*, d'Orb. (fig. 74), *R. scalarella*, C. B. Ad., *R. candida*, Brown, and var. *Floridana*, Mörch.

R. triticea, Pease. Pl. 56, fig. 76; Pl. 57, fig. 77.

Whitish, with 11 compressed, prominent, continuous longitudinal ribs, spiral sculpture very indistinct or wanting; whorls 6, slightly convex, with impressed suture; lip thickened. Length, 2·75 mill.

Red Sea, Indian Ocean, Mauritius, Polynesia.

It is *R. scalariformis* of Schwartz, etc. (not Ads.) in part, *R. orientalis*, Nevill, and *R. exigua*, Dunker (fig. 77).

R. Bureasensis, Sowb. Pl. 68, fig. 10.

Solid, yellowish white, with slight, curved longitudinal ribs, fading out on the upper part of the body whorl, smooth; columella thick, short, rather tortuous, almost truncated, outer lip thick. Length, 5·5 mill.

Ins. Bureas, Philippines.

R. cincta, Angas. Pl. 68, fig. 8.

White, interruptedly chestnut banded, flexuously longitudinally costate, the interstices spirally striate; whorls 7, slightly convex, the last subreticulated. Length, 5 mill.

Port Jackson, Australia.

R. fasciata, Angas. Pl. 68, fig. 7.

Fulvous, with a peripheral chestnut band, appearing on the spire whorls at the suture, with numerous, flexuous longitudinal ribs; whorls 7, slopingly convex; outer lip thick, columella short, almost truncate. Length, 6 mill.

New Zealand.

R. rosea, Desh. Pl. 68, fig. 4.

Rosy white, or roseate, longitudinally plicate, plicæ occasionally varicose; whorls 8, slightly convex, with submargined suture; columella subplicate, lip white, widely thickened. Length, 6 mill.

Ins. Bourbon.

R. flexuosa, Gould. Pl. 68, figs. 2, 1.

Yellowish or chestnut brown, with about 15 obtuse, flexuous longitudinal ribs, and numerous spiral lines; whorls 7, angularly

shouldered, with impressed suture; lip slightly thickened, columella truncately twisted. Length, 15 mill.

Sydney, Australia.

Gould's description was made from an immature specimen (fig. 1); Angas subsequently described it as *R. turricula*, which being preoccupied by Pease, the latter changed to *R. Angasi*.

R. MAINWARINGIANA, Nevill. Unfigured. *Persian Gulf.*

Section PHOSINELLA, Mörch. 1876.

R. CLATHRATA, A. Adams. Pl. 57, fig. 79.

Solid, white, a little shining, clathrate by longitudinal and spiral ridges; whorls 9–10, slightly convex, the last whorl with a basal sulcus and rib below it; lip varicose, subchanneled below.

Length, 12 mill.

Red Sea, Singapore, Philippines, Australia.

R. BICOLLARIS, Schwartz. Pl. 57, fig. 80.

Solid, white, with 18–20 longitudinal, clathrate by spiral ridges, about 8 of the latter on the last whorl. Length, 7 mill.

West Indies.

R. FENESTRATA, Schwartz. Pl. 57, fig. 81.

Solid, white, with 12–14 longitudinal, crossed by spiral liræ, of which there are 5 on the last whorl, intersections nodose; lip varicose, the varix strongly transversely ridged. Length, 4·3 mill.

West Indies, Florida.

R. CANCELLATA, Phil. Pl. 57, figs. 84, 95, 82, 83.

White, cancellated, with 16–18 longitudinal and 7–8 spiral riblets on the last whorl; whorls convex, with deep suture, base with a sulcus, below which are three spiral ribs. Length, 3·3 mill.

West Indies.

R. Philippiana, Pfr. (fig. 95) is a synonym.

Var. PULCHRA, C. B. Ad. Figs. 82, 83.

White, with two distant yellowish bands, cancellated, with 20–22 longitudinal and 7 spiral ridges in the last whorl, the intersections nodose, basal sculpture as in the type. Length, 5·3 mill.

West Indies.

R. PRIVATI, Folin. Pl. 58, fig. 9.

Solid, white, clathrate by longitudinal and spiral ridges; whorls 11, slopingly convex, suture impressed, crenulated; lip subacute.

Length, 5·5 mill.

Haiti.

Perhaps a variety of the preceding species.

R. DESHAYESII, Schwartz. Pl. 57, fig. 87; Pl. 68, fig. 9.

Solid, shining, semipellucid, white, nodulously decussated by about 22–24 erect longitudinal, crossed by equal spiral liræ; whorls 9–10, suture impressed, undulated, base channeled and spirally ribbed; lip crenulately varicose, excised below. Length, 9·4 mill.

Philippines.

I suppose that *R. Deshayesiana*, Recluz. (fig. 9), of the Conchologia Iconica is intended for the same species.

R. MEDIA, Schwartz. Pl. 57, fig. 89.

Solid, white or yellowish, semipellucid, shining, with 18–20 longitudinal, crossed by spiral ridges; whorls 8, subconvex, with distinct but narrow suture, the base with a funiculum of three spiral riblets; lip sinuous, produced below, varix crenulated.

Ceylon, Java, Nicobar Is.

R. LABROSA, Schwartz. Pl. 57, fig. 88.

Solid, white, semipellucid, shining, with 24–26 erect, elevated longitudinal, crossed by closer, less elevated spiral liræ; whorls 9–10, flatly convex, suture subcarinated; lip tumid, thick, broadly sinuated below, crenulately varicose. Length, 9·5 mill.

West Indies.

R. TRANSENNA, Watson. Pl. 58, fig. 10.

Solid, white, with 12–14 remote, narrow longitudinal ribs, crossed by somewhat closer spiral liræ; whorls about 7½, convex, but with somewhat shallow suture, basal funiculum consisting of a single nodulous ridge; inner lip concave in the middle, outer lip with a crenulated varix. Length, 3·3 mill.

Fiji Is.

R. ERYTHRÆA, Phil. Pl. 57, figs. 97–2; Pl. 58, figs. 3, 4.

Rather solid, white, with 12–14 longitudinal costæ, crossed by closer liræ, the two upper liræ thinner, the lower one granular; whorls slightly convex, with inconspicuous suture; peristome distinctly labiate within, externally varicose, produced below.

Length, 9·75 mill.

Red Sea to Hong Kong, Loo Choo Is.

R. Jickelii, Weinkauff (fig. 4), *R. Blanfordiana*, Nevill (fig. 3), *R. Hungerfordiana*, Nevill (fig. 2), *R. Seguenziana*, Issel (figs. 97, 98) and *R. strigillata*, Gould (figs. 100, 1), as figured by Weinkauff, are synonyms; whether the latter really represents Gould's species is extremely doubtful.

R. BELLULA, A. Ad. Pl. 57, figs. 93, 85.

Semipellucid, white, with strong, distant spiral ribs, nodose at the intersection of usually closer and smaller, longitudinal liræ; whorls 8, slightly convex; lip produced below, externally crenulately varicose. Length, 5 mill.

Philippines.

R. nitida, A. Ad. is apparently identical, but the figure of it given in Reeve's Iconica (fig. 85), looks very like the next species.

R. NODICINCTA, A. Ad. Pl. 57, fig. 94; Pl. 58, fig. 7.

White, with long spiral riblets, generally two on the spire whorls, three or four on the body whorl, the upper ones strongest, nodulous at the crossing of distant longitudinal riblets; whorls 9–10, biangular, with deep suture; lip flexuous, varicose.

Length, 10·6 mill.

Philippines, New Caledonia.

The latter locality is that of *R. hystrix*, Souverb. (fig. 7).

R. GRANULOSA, Pease. Pl. 58, figs. 12, 5.

Solid, white, shining, with three spiral rows of tuberculated ribs on each whorl, and two additional, smaller rows on the lower part of the body whorl, crossed by distant longitudinal riblets; whorls 9, slightly convex, closely striate in the interstices, suture deeply impressed, base with a funicular rib; peristome thick, somewhat dilated. Length, 8·5 mill.

Sandwich and Viti Is.

Pease's single specimen was a juvenile, with four whorls. The above description is taken from that of *R. sculptilis*, Garrett (fig. 5). The species may prove to be a variation of *R. nodicincta*.

R. HORRIDA, Garrett. Pl. 58, figs. 8, 11; Pl. 68, fig. 11.

Thick, white, with distant clathrate ridges, the intersections nodulous, the interspaces deep, in spiral series there are two or three ridges on the upper whorls, and four on the body whorl, besides the basal funiculum; lip varicose, rather widely channeled in front. Length, ? 7 mill.

Viti Is., Port Curtis, Australia.

R. Curtisii, E. A. Smith (fig. 11), and *R. australis*, Sowb. (Pl. 68, fig. 11), are synonyms.

R. CERITHIIFORMIS, Dunker. Pl. 57, fig. 92.

Solid, semipellucid, shining, white, with sometimes a single yellowish band, with 16–18 riblets, vanishing on the base, crossed by spiral liræ, of which there are 4 on the spire, and 7 on the body whorl; whorls 7–8, flatly convex, with channeled suture, base with funiculum; lip externally varicose, columella subtruncate below.

Length, 3·3 mill.

Red Sea, Mauritius, Viti and Sandwich Is.

R. Erythræa, Schwartz, not Phil., is identical, and is the only figure heretofore published; it shows a basal tooth, which is not mentioned in the description, nor does it exist in any of my specimens. It is probably an accidental effect of the produced canal in an old specimen.

R. EXASPERATA, Souverb. Pl. 57, fig. 96.

White, with numerous subobtuse longitudinal ribs and elevated spiral lines, forming rough intersections; whorls 8–9, convex, with deep suture, base subcompressed; lip crenulately varicose.

Length, 3·5–4·5 mill.

New Caledonia, Viti Is.

R. SAGRAIANA, d'Orb. Pl. 57, fig. 86.

Solid, shining, semipellucid, white, granulated by decussating longitudinal and spiral ribs, base with a granular funiculum; whorls 8–9, convex, with deep suture; lip varicose.

Length, 4·3 mill.

West Indies.

R. SAMOENSIS, Dunker. Pl. 57, fig. 99.

Solid, white, with about 14 longitudinal ribs, crossed by spiral lines, of which there are 7 in the last whorl, basal funiculum nodulous; lip crenulately varicose. Length, 4 mill.

Ins. Upolu, Taheiti.

R. CREBRISULCATA, Sowb. Pl. 68, fig. 13.

Whitish, scabrous, with strong, longitudinal, suboblique ribs, nodosely decussated by thin spiral liræ; whorls 8, slightly convex; aperture channeled below, with a short, thick columella, outer lip thick, crenulately varicose. Length, 4 mill.

Hab. unknown.

R. SCABRA, Garrett. Pl. 58, fig. 6.

Shell solid, vitreous, shining, white, with small, rather close, compressed, slightly oblique longitudinal ribs, crossed by numerous

small, spiral ridges, the intersections granular; whorls 8, flatly convex, subturrited, with deep suture; outer lip stoutly varicose.

Length, 4 mill.

Viti and Samoa Is.

Unfigured Species.

R. BALTEATA, Pease. *Sandwich Is*

R. NITIDULA, Gould. *China Sea.*

R. VILLICA, Gould. *Loo Choo Is.*

The figure named thus in Conch. Icon. represents *R. subvillica*, Nevill.

R. INFREQUENS, C. B. Ad. *Panama.*

Section ZEBINELLA, Mörch. 1876.

R. RETICULATA, Sowb. Pl. 58, figs. 14, 16.

Subsolid, a little shining, whitish, densely reticulated by equal longitudinal and spiral striæ, suture subplane; whorls 10–12, rather flat; lip sinuous, produced at the base, subthickened externally.

Length, 12–14 mill.

West Indies, Bahamas.

R. princeps, C. B. Ad. (fig. 16), is a synonym, and I cannot see how Dr. Weinkauff was justified in considering Sowerby's figure to represent a different species from that of Adams' description. In consequence of this opinion he named the former *R. pseudoprinceps*.

R. DECUSSATA, Mtg. Pl. 58, figs. 15, 17.

Solid, white, shining, with 25–28 slight longitudinal riblets, evanescent below, crossed by very close spiral lines, suture constricted, margined. Length, 5–6 mill.

Florida, West Indies.

First described as British, from a stray specimen. The synonyms are *R. cochlearia*, Bast., *R. subcochlearia*, Orb., *Turbo arenarius*, Maton and Rack., *R. alata*, Menke, *R. pyramidella*, Brown, *R. striato-costata*, d'Orb. (fig. 17), *R. striosa*, C. B. Ad., *R. costulina*, Sismondi.

R. STRIATA, Quoy. Pl. 57, fig. 91; Pl. 58, figs. 13, 23; Pl. 68, fig. 12.

Solid, white, with close longitudinal and spiral lines, the former obsolete on the body whorl; whorls 9–10, slightly convex, apex usually decollated, suture linear; aperture expanded, produced below, lip externally thickened. Length, 17·6 mill.

Philippines, Singapore.

It is *R. cælata*, A. Ad. (fig. 91), *R. grandis*, Phil., and *R. Cumingii*, Reeve, of Sowerby in Conch. Icon. (Pl. 68, fig. 12).

I think that *R. elegantula*, Angas (fig. 13), from So. Australia, will prove a younger state of the species; it has 8 whorls, and is 6 mill. long. A still younger state is probably *R. Mohrensterni*, Desh. (fig. 23), from the Isle of Bourbon; to which locality Nevill adds Red Sea, Indian Ocean and Upolu (*R. Schmeltziana*, Dkr. Ms.).

R. ANDAMANICA, Weink. Pl. 58, fig. 21.

Solid, whitish, with narrow, straight, slight, close longitudinal riblets; whorls 8, suture linear; columella nodosely thickened below, lip varicose. Length, 8 mill.

Andaman Is.

R. CONCINNA, A. Ad. Pl. 58, fig. 18.

Solid, shining, white, closely longitudinally striate, the striæ obscure below, and spirally striulate; whorls 7, slightly turrited, flattened; columella callous below, lip externally varicose.

Length, 5 mill.

Philippines.

R. ADAMSIANA, Weinkauff. Pl. 58, fig. 20.

White, very obliquely, flexuously striate, with linear suture; whorls 7, flattened; columella thick, lip thickened and expanded, not varicose. Length, 4 mill.

Japan.

R. EVANIDA, Nevill.

White, rather indistinctly, obliquely, longitudinally undulated, narrowly and scabrously spirally striate; whorls 6, somewhat convex; lip crenulated and varicose. Length, 2·5 mill.

Andaman Is.

R. TENUISTRIATA, Pease. Pl. 58, fig. 24.

Solid, white, thinly longitudinally striate, the striæ fading below, where they are replaced by spiral lines; whorls 6–7, subconvex; aperture subeffuse, with callous columella. Length, 9 mill.

Paumotus Is.

The figure is a copy of that originally given for this species, but does not at all correspond with the specimens before me, sent by Pease under this name.

R. DIMIDIATA, Jickeli. Pl. 58, fig. 22.

Rather solid, whitish, longitudinally narrowly costulate, the riblets fading on upper part of body-whorl, interstices and base of

body-whorl impressly spirally striate; whorls 8, slightly convex, with impressed suture; lip scarcely varicose. Length, 4·3 mill.

Red Sea.

R. STRIATULA, Pease. Pl. 68, fig. 16.

Strong, white, closely and thinly spirally striate; whorls convex, suture shallow; aperture effuse below, columella callous, lip not varicose. Length, 9 mill.

Paumotus Is.

R. FLAMMEA, Pease. Pl. 68, fig. 17.

Solid, whitish, with longitudinal ashy grey stripes, subconfluent, spirally finely grooved, the grooves interruptedly lined with light brown; whorls plane, suture well impressed. Length, 3 mill.

Caroline Islands.

Described as a Rissoa—which perhaps it is.

R. ZELTNERI, Folin. Pl. 68, fig. 19.

Shell solid, shining, white, with numerous, thin, oblique, longitudinal striæ, evanescent below, spiral striæ inconspicuous or obsolete except on the base, where they become distinct and replace the longitudinal sculpture; columella a little truncate, diagonal, ending in a narrow channel, lip thickened. Length, 4·5 mill.

Panama.

R. MILLECOSTATA, Garrett. Pl. 56, fig. 47.

Rather thin, white, with numerous, slightly oblique, close, minute longitudinal riblets, and fine spiral striæ, both becoming obscure below; whorls 11, flatly convex, with deeply incised suture; peristome thick, slightly sinuous above, not varicose.

Length, 9 mill.

Viti Is.

Unfigured Species.

R. SIGMIFER, Mörch.	*Bahamas.*
R. JANUS, C. B. Ad.	*Panama.*
R. MODESTA, Gould.	*Loo Choo Is.*
R. ANNULATA, Hutton.	*New Zealand.*

Section MORCHIELLA, Nevill. 1884

R. GIGANTEA, Desh. Pl. 58, fig. 25.

Solid, somewhat shining, white; whorls 9, convex, the first ones with longitudinal costæ crossed by thin spiral striæ, afterwards the

spiral sculpture alone persists to the last whorl, where it also becomes obsolete; lip varicose. Length, 28 mill.

Philippines.

It is *R. Cumingii*, of H. and A. Adams, not Reeve.

R. ANTONI, Schwartz. Pl. 58, fig. 26.

Solid, white; whorls 7–8, well rounded, with channeled suture, the earlier whorls longitudinally ribbed, nodulously cancellated by three revolving ribs, on the penultimate the spiral sculpture is most prominent, and on the body whorl there is no sculpture except a narrow shoulder; lip thickened and varicose. Length, 7·8 mill.

Java.

R. SPIRATA, Sowb. Pl. 58, figs. 27–29; Pl. 59, figs. 30–32, 35–37.

Shell rather solid, smooth, microscopically spirally striate, somewhat shining, white; whorls 7–8, flattened, the earlier ones with longitudinal costæ, often subject to a torsion of the axis, suture narrowly channeled; lip thick, but not varicose.

Length, 15–23 mill.

Indian Ocean, Japan, Philippines, New Caledonia, Viti Is.

The above description has necessarily been rendered so as to cover a little variation in form and sculpture, necessitated by the inclusion of several names as synonyms; thus some specimens are distorted, others straight, there is a difference in the convexity of the whorls, and some are smooth, varying to those in which faint spiral striæ are perceptible. The synonymy includes *R. deformis*, Sowb. (fig. 27), *R. Montrouzieri*, Souverb. with its vars. *substriolata*, *monstrosa* and *convexior* of Nevill—held by some conchologists to be the *R. deformis* of the "Conch. Icon." (fig. 35), but not that of the "Genera of Shells," *R. supracostata*, Garrett (fig. 31), *R. striolata*, A. Ad. (fig. 30), *R. Lamberti*, Souverb. (fig. 32), *R. Japonica*, Weink. (fig. 36), *R. d'Orbignyi*, A. Ad. (fig. 28), and its vars. *submarginata*, *subspirata* and *pachylabris*, Nevill, and *R. Artensis*, Montr. (fig. 37). *R. concinna*, A. Ad., made by him a species of Microstelma, is said to be a broken, juvenile of this species.

R. ALBIDA, C. B. Adams. Pl. 59, fig. 34.

Diaphanous, whitish, spire sharp, elegantly decussated by longitudinal costæ and spiral liræ; whorls 10, suture submargined, body-whorl smooth. Length, 6·2 mill.

West Indies.

R. affinis, C. B. Ad. (unfigured), is supposed to be a narrower variety of this species.

R. PERCRASSA, Nevill. Pl. 59, figs. 38, 51.

Solid, shining, white; whorls about 12, the earlier normal ones longitudinally costate, afterwards smooth, suture narrowly margined; lip thickened, smooth within, externally varicose.

Length, 12·5 mill.

Upolu, Tahiti, Mauritius.

R. percrassa (fig. 38), was described from a Mauritian specimen, abnormal in possessing a strong callous thickening of the lower part of the body whorl; subsequently, what appears to be a normal growth of the same species was described by Nevill under the name of *R. Peasiana* (fig. 51).

R. INSIGNIS, Ad. and Reeve. Pl. 59, figs. 40, 33.

Solid, white, or tinged with yellow; whorls 5, subgradate, the upper ones longitudinally costate, the others spirally striate; lip thick, crenulated within. Length, 9 mill.

Red Sea, Indian Ocean, China, Society Islands.

The last locality is for *R. turrita*, Garrett (fig. 33). The figure and the type specimen do not exhibit the interior crenulations of the lip, but they are mentioned in Garrett's description, and probably the latter was drawn from a more adult specimen than the one sent for illustration.

Section ZEBINA, H. and A. Adams. 1854.

R. TRIDENTATA, Mich. Pl. 59, figs. 41–44, 39, 54; Pl. 68, fig. 14.

Solid, smooth, polished, white, whorls 7, almost plane, the upper ones sometimes costate, suture simple; lip subdilated, thickened, not varicose, tridentate, bidentate, or unidentate within, sometimes without teeth. Length, 8 mill.

Red Sea, Philippines, Mauritius, Viti and Sandwich Is.

It is *R. curta*, Sowb. Ms., *R. crassilabrum*, Garrett (fig. 14), *R. semiglabrata*, A. Ad. (fig. 39), *R. bidentata*, Phil. (fig. 42), *R. coronata*, Recluz. (fig. 43), *R. eulimoides*, A. Ad. (fig. 44), and *R. semiplicata*, Pease (fig. 54), not adult.

R. AFFINIS, Garrett. Pl. 59, fig. 62.

Rather solid, smooth, shining, white, spire elevated, rapidly tapering; whorls 7–8, slightly convex, the last swollen, slightly compressed, suture linear; lip very thick, dilated, sinuous above and below, columella and parietal region callous. Length, 5 mill.

Viti Islands.

Appears to differ from the foregoing species, in being usually narrower, with as many or more whorls, although smaller in size.

R. ORYZA, Garrett. Pl. 59, fig. 47, 53, 52, 56.

Solid, smooth, shining, white, spire rapidly tapering, with obtuse apex; whorls 6–7, flatly convex, suture broadly margined; lip thick, dilated, columella oblique. Length, 2 mill.

Viti Islands (Garrett), *Persian Gulf*, *Mauritius* (Weinkauff), *Japan* (Adams).

R. Stoppani, Weink., not Issel (fig. 53), and *R. subulina*, Weink. (fig. 52), from Japan, are synonyms; the latter a somewhat larger shell (3·75 mill), having 8 whorls. The Red Sea fossil species, which Issel called *R. Stoppani*, has no margined suture.

Var. SUBLÆVIGATA, Nevill. Fig. 56.

Appears to differ principally in the aperture being more broadly rounded below.

Indian Ocean, Polynesia.

R. LÆVIGATA, C. B. Adams. Pl. 59, figs. 48, 50.

Shining, pellucid, smooth, white; whorls 9–10, slightly convex, suture white-margined; lip subdilated, externally thickened.

Length, 4·5 mill.

West Indies.

The above is the description of *R. vitrea*, C. B. Ad. (fig. 50), which appears to be the adult of the earlier described *R. lævigata*.

R. BROWNIANA, d'Orb. Pl. 59, figs. 45, 46.

Solid, polished, white, usually with two or three chestnut bands on the last whorl, bimaculate near the aperture; whorls 8–9, slightly convex; suture not margined; lip thickened externally.

Length, 4·7 mill.

West Indies.

R. lævissima, C. B. Ad., is a synonym, according to Mörch, etc. The figure, however, as given in Reeve's Iconica (fig. 46), appears more nearly related to the next species.

R. SLOANIANA, d'Orb. Pl. 59, fig. 49.

Thick, white, smooth, polished; whorls 5–6, flatly convex, suture not margined; lip externally thickened, with usually two internal callous teeth. Length, 3·8 mill.

West Indies.

Besides frequently being possessed of apertural teeth, this species is stouter, with fewer whorls than the preceding one.

Section PYRAMIDELLOIDES, Nevill. 1884.

R. MIRANDA, A. Ad. Pl. 59, figs. 57–59, 55.

White, whorls 7, with revolving nodulous ribs, of which there are two of unequal size on the spire whorls, the body whorl with about four series; outer lip crenulately varicose. Length, 3 mill.

Red Sea, Indian Ocean, Japan, Mauritius.

R. insolita, Desh. (fig. 55), and *R. Bellardii*, Issel (fig. 59), are synonyms.

Section STOSSICHIA, Brusina. 1878.

R. PSEUDOCONCINNA, Nevill. Pl. 58, fig. 19.

Whitish, thinly longitudinally costulate, and more thinly spirally striate, the longitudinal sculpture obsolete below; whorls 6, somewhat convex; aperture narrowly channeled in front, lip varicose. Length, 9 mill.

Japan.

This name is substituted for *R. concinna*, Sowb., not Adams.

R. MIRABILIS, Dunker. Pl. 59, fig. 60.

Light ochraceous; whorls 9, somewhat convex, with close longitudinal ribs, crossed by spiral liræ, the intersections nodulous; suture impressed; aperture widely channeled below, columella nodulous below, lip varicose. Length, 5·5 mill.

Ins. Upolu.

R. ABNORMIS, Nevill. Pl. 59, fig. 61.

White; whorls 6, with about 15 longitudinal ribs, vanishing towards the base, crossed by dense spiral liræ, the intersections subgranular; aperture broadly channeled, lip crenulately varicose. Length, 3 mill.

Mauritius, Ceylon.

Subgenus EATONIELLA, Dall. 1876.

R. KERGUELENENSIS, Smith. Pl. 60, fig. 67.

Scarcely rimate, thin, semipellucid, blackish olivaceous, lighter towards the lip, a little shining, striated by incremental lines; whorls 6, convex, suture simple; peristome simple, continuous. Length, 3 mill.

Kerguelen's Land.

R. SUBRUFESCENS, Smith. Pl. 60, fig. 68.

Scarcely rimate, thin, semidiaphanous, chestnut color, whitish towards the lip, smooth, with thin incremental striæ; whorls 4½,

convex, with deep suture; aperture subcircular, peristome continuous. Length, 1·5 mill.

Kerguelen's Land.

R. CALIGINOSA, Smith. Pl. 60, fig. 69.

Scarcely rimate, rather thin, slightly shining, smooth, with obsolete incremental striæ, blackish; whorls 4½, convex, with deep suture; peristome continuous, smoothly thickened, reflected at the whitish umbilical region. Length, 2 mill.

Kerguelen's Land.

On account of *Littorina caliginosa*, Gould, which he supposed to belong to the same group, Dr. Dall changed the name of the present species to *R. Smithii*.

Unfigured Species Referred to Rissoina.

The subdivisions not indicated in the descriptions.

R. GRACILIS, Pease. *Sandwich Is.*

R. TERES, R. PULCHELLA, R. INCONSPICUA, R. INERMIS, R. EFFICATA, R. CARDINALIS, Brazier. *Australia.*

R. SUPRASCULPTA, R. KERSHAWI, R. CYLINDRACEA, R. CRETACEA, Tenison-Woods. *Australia.*

R. MINUTISSIMA, R. UNILIRATA, R. FLINDERSII, R. CONCATENATA, Tenison-Woods. *Tasmania.*

R. APPROXIMA, Petterd. *Tasmania.*

R. EXPANSA, Carpenter. *Mazatlan.*

R. INTERFOSSA, Carp. *California.*

R. CONTABULATA, Mörch. *Sonsonate, Central America.*

R. VITRINELLA, Mörch. *West Indies.*

R. PLICATA, R. RUGULOSA, Hutton. *New Zealand.*

Genus BARLEEIA, Clark. 1855.

B. RUBRA, Adams. Pl. 60, figs. 70–72.

Solid, smooth, shining, indistinctly spirally striate, chestnut or yellowish brown color; whorls 5½, slowly increasing, suture smooth, margined by a darker band, lip thick, simple. Length, 2·5 mill.

Europe.

B. unifasciata, Mont. (fig. 71), *B. aurantiaca*, Brus., *B. fulva*, Mich. (fig. 72), and vars. *majuscula*, Monts. (*major*, Monts.), *albescens*, Requien, *pallida*, Jeffreys, are synonyms.

B. SUBTENUIS, Carpenter. Pl. 60, fig. 73.

Thin, subpellucid, corneous-chestnut; with 4 normal whorls, flatly convex, with distinct suture; lip acute. Length, 2·8 mill.

Southern California to Mazatlan.

Var. RIMATA, Carp.

A little more tumid, whorls less flattened, umbilical slit conspicuous.

B. HALIOTIPHILA, Carp. Pl. 60, fig. 74.

Smooth, thin, chestnut colored; normal whorls 5, subplanate, with distinct suture, body whorl obsoletely angulated; lip thin. Length, 2·5 mill.

Lower California (on Haliotis).

B. IMBRICATA, Watson. Pl. 60, fig. 75.

Brownish-yellow to white, with incremental striæ above, base spirally striate; whorls 8, flat, a little angulated above and below the impressed suture; lip sharp, thin. Length, 2·75 mill.

Sandwich and Fiji Islands, N. E. Australia.

B. ROSEA, Hutton. Pl. 71, fig. 6.

Whorls 4, flatly convex, smooth, polished, bright pink or white; aperture round. Length, 1·75 mill.

Stewart Isl., New Zealand,

R. IMPOLITA, R. NANA, Hutton. (Unfigured). *New Zealand.*

Genus FAIRBANKIA, Blanf. 1868.

F. BOMBAYANA, Blanf. Pl. 60, fig. 63.

Imperforate, somewhat solid, whitish, under a brownish olivaceous epidermis, the incremental striæ crossed by spiral rather distant lines; whorls 7, slightly convex, suture impressed; lip a little expanded, with strong external varix. Length, 7 mill.

Bombay.

F. FEDDENIANA, Nevill. (unfigured). *Kathiawar, India.*

Genus IRAVADIA, Blanf. 1867.

I. ORNATA, Blanf. Pl. 60, fig. 66.

Imperforate, solid, whitish under a brownish or olivaceous epidermis, with spiral costæ, the interstices closely vertically costulate;

whorls 9–10, slopingly flattened, suture inconspicuous; lip nodosely varicose. Length, 4·5 mill.

Pt. Canning and Delta of the Irawady.

I. TROCHLEARIS, Gould. Pl. 60, figs. 64, 65.

Imperforate, thick, ash colored, with 7 whorls, of which 4 are normal, with elevated spiral ribs, interstices channeled and very finely decussated; lip subvaricose. Length, 4 mill.

Japan, Hong Kong, Singapore, Ceylon, Persian Gulf.

I. sulcifera and *I. ligata*, Gould, teste Sowb., *I. imbricata*, Gould, *I. annulata*, Dunker, and var. *minor*, Nevill (fig. 65), are synonyms.

I. SULCIFERA, Troschel. Pl. 68, fig. 95.

Turreted, thick, strongly spirally ribbed and sulcate, 10 ribs on the last, 4 on the upper whorls, those on the base smaller, suture distinct; lip thick, but not varicose, expanded below.

Length, 12 mill.

Peru.

An aberrant form which I am unable to locate satisfactorily. I am not aware that it has been recognized by any conchologist since its publication in 1852.

Genus FENELLA, A. Ad. 1871.

F. PUPOIDES, A. Ad. Pl. 60, fig. 76.

Imperforate, thin, pupoidal, pale brown, with a chestnut band on the middle of the whorls, two on the last whorl; whorls 7½, earlier ones subangulated in the middle, the others convex, spirally striate; lip simple.

Japan.

Is perhaps a variation of the next species.

F. VIRGATA, Phil. Pl. 60, fig. 79.

Thin, yellowish, with light chestnut longitudinal flames, closely spirally striate; whorls 7–8, convex, sometimes varicose; columella subtruncate. Length, 6 mill.

Red Sea.

F. SUBPUPOIDEA, Tryon. Pl. 60, fig. 77.

Whorls about 6, convex, closely spirally striate, thin, light olivaceous or brownish, with a series of chestnut spots under the suture; lip simple, sharp. Length, 6 mill.

Monterey, Cal.

Name changed from *F. pupoidea*, Carp., preoccupied by A. Adams.

F. EXCURVATA, Carp. Pl. 60, fig. 78.

Thin, turreted, purplish brown; whorls 8, the first two smooth, afterwards bi-or tricarinate, the others superficially cancellated, base spirally striate only; lip thin. Length, 2·75 mill.

Mazatlan.

F. CERITHINA, Phil. Pl. 60, figs. 80, 81.

Granularly decussated by about 15 longitudinal riblets and 4 spiral liræ, base spirally costulate, chestnut colored; whorls 8, flatly convex, with deep suture; lip simple. Length 3·3 mill.

Ins. Rodriguez, Red Sea, Persian Gulf, Japan.

F. reticulata A. Ads. (fig. 81), and *F. scabra*, A. Ads., are synonyms.

F. ELONGATA, Watson. Pl. 60, fig. 82.

White, with lattice-like sculpture of distant longitudinal ribs, crossed by two or three spiral riblets (about four in last whorl); whorls 12, convexly biangulated, with deep suture. Length, 9 mill.

Culebra I., W. I.; 390 fms.; *Azores*, 1000 fms.

F. INFRATINCTA, Garrett. Pl. 60, fig, 83.

Rather thin, subpellucid, shining, whitish, tinged with brown at the base, decussated by longitudinal ribs and spiral liræ; whorls 8, moderately convex, with impressed suture; lip thin.

Length, 2·5 mill.

Viti and Samoa Islands.

F. SEMICOSTATA, Pease. Pl. 60, fig. 84.

Subcylindrical, rather solid, whitish or light yellowish, with small, close, longitudinal rounded ribs, crossed by close spiral striæ, the ribs becoming evanescent on lower part of body whorl; whorls 5–6, slightly convex, with shallow, impressed suture.

Length, 3 mill.

Caroline Islands.

Unfigured Species.

F. FULGIDA, C. B. Ad. (Nevill).	*Natal.*
F. RISSOIFORMIS, Issel.	*Red Sea.*
F. CRYSTALLINA, Carpenter.	*Cape St. Lucas, L. California.*
F. VINACEA, Recluz, (Nevill).	*Mauritius.*

Dunkeria ferruginea, candida, rufocincta, fusca, craticulata, asperulata, pulchella, all of A. Adams.

China and Japan.

These have been included in Fenella by Nevill.

Genus PUTILLA, A. Ad. 1867.

P. lucida, A. Ad. Pl. 60, fig. 85.

Rimate, solid, subpellucid, smooth, shining, white; whorls 4, convex; lip simple, thick. Length, 3 mill.

Japan.

Genus SKENELLA, Pfeffer. 1886.

S. Georgiana, Pfeffer. Pl. 60, fig. 96, 97.

Shell with Lacuna-like umbilicus, obliquely, longitudinally, irrregularly, thinly, plicate-striate, greyish brown; whorls 3, rounded, with deep suture; lip simple, acute, continuous, aperture bright corneous, shining. Length, 1·5 mill.

Isl. South Georgia.

Family *JEFFREYSIIDÆ.*

Genus JEFFREYSIA, Alder. 1849.

J. bifasciata, Carp. Pl. 60, fig. 86.

Narrowly umbilicated, diaphanous, very thin, smooth, light brownish, with two darker bands, sometimes absent; whorls 5, subtumid, suture impressed, margined. Length, 1·25.

Mazatlan.

J. Alderi, Carp. Pl. 60, fig. 87.

Like the preceding, but much larger and more solid; whorls 5, more planate, bands narrow. Length, 1·75 mill.

Mazatlan; *Todas Santos Is., L. Cal.*

J. glabra, (Alder) Brown. Pl. 60, fig. 88.

Shell rimate, very thin, pellucid, smooth, vitreous white, spire obtusely truncate; whorls 4½, convex, with deep suture; aperture rounded, columella flexuous. Length, 1·5 mill.

Europe.

J. diaphana, Alder is a synonym, and is the name under which this species is generally known.

J. opalina, Jeffreys. Pl. 60, fig. 89.

Rimate, very thin, semipellucid, shining,, opaline, corneous; whorls 3½, tumid, rapidly increasing; lip acute, base expanded, columella flexuous. Length, 2 mill.

Europe.

Monterosato has indicated a var. *minor.*

J. GLOBULARIS, Jeffreys. Pl. 60, fig. 90.

Narrowly rimate, very thin, pellucid, iridescent, smooth, white, apex obtuse; whorls 3½, rapidly increasing, suture deep; aperture subsolute, lip thin, a little incurved above. Length, 1 mill.

Great Britain.

J. CYLINDRICA, Jeffreys. Pl. 60, fig. 91.

Narrowly umbilicated, shining, hyaline; whorls 4, shortly convex, apex obtuse, suture distinct; aperture subeffuse, lip continuous. Length, 1 mill.

Mediterranean Sea.

J. EDWARDIENSIS, Watson. Pl. 60, fig. 92.

Minutely rimate, thin, glossy, hyaline white, microscopically longitudinally and spirally striate; whorls 4½, tumidly convex, suture rather shallow. Length, 1·85 mill.

Prince Edward Isl. between Cape of Good Hope and Kerguelen.

J. SANCTI–PAULI, Vélain. Pl. 60, fig. 93.

Minutely rimate , thin, slightly spirally striate; whorls 5, moderately convex, suture narrowly margined; aperture rounded oval, lip sharp. Length, 3 mill.

Ins. St. Paul, Indian Ocean.

Unfigured and undetermined species.

J. MINIMA, J. MUNDULA, J. TURGIDULA, J. HYDROPHANA, J. VITRINA, J. VESICALIS, J. SPIRALIS, J. OMPHALOTROPIS, A. Ad.
Japan.

J. TRANSLUCENS, Carp. *California.*

J. TUMENS, Carp. = *Cythnia*, Vol. viii, p. 293.

J. NITIDA, Sars. = *Liostomia eburnea*, Stimp. Vol. viii, p. 344.

J. vitrea, Jeffreys is a synonym.

Subgenus TATEA, Tenison Woods. 1879.

J. HUONENSIS Tenison Woods. Pl. 60, fig. 94.

Scarcely rimate, thin, smooth, corneous or light olivaceous; whorls 7, flatly convex, periphery subangulated; aperture oval-rounded, peristome darker colored, acute. Length, 4 mill.

Tasmania.

Subgenus DARDANIA, Hutton. 1882.

J. OLIVACEA, Hutton. Pl. 60, fig. 95.

Imperforate, smooth, with fine growth-lines, shining, olivaceous or blackish, often showing a few grey spots around the suture, and

another series on the periphery of the last whorl; whorls 4, convex, with impressed suture. Length, 2 mill.

New Zealand (on seawood).

Family *SKENEIDÆ.*

Genus SKENEA, Fleming. 1828.

S. SUBCANATICULATA, E. A. Smith. Pl. 60, figs. 98, 99.

Shell thin, subdiaphanous, whitish, widely, profoundly umbilicated; whorls 3½, slowly increasing, convex, with deep, almost channeled suture. Diam. 1·3 mill.

Kerguelen Island.

S. PLANORBIS, Fabr. Pl. 60, fig. 100.

Rather thin, widely, patulously umbilicated, opaque, brownish-yellow, or pale olivaceous, spire slightly elevated; whorls 4, subcylindrical, rapidly increasing, smooth, base subconcave, suture deep. Diam. 1·4 mill.

Europe, Greenland to Massachusetts.

It is *Helix depressa*, Mont., and *S. trochiformis*, Locard. *S. serpuloides* of Gould and earlier American authors is also to be placed here.

S. SERPULOIDES, Montg. Pl. 60. figs. 1, 2.

Widely umbilicated, its wall with spiral striæ, brownish yellow, smooth; whorls 4, cylindrical, spire a little elevated, suture deep. Diam. 1 mill.

Europe.

It is *Delphinula lævis*, Phil. (fig. 1.), and *S. divisa*, Forbes and Hanley.

Unfigured Species.

S. HELICINA, (Jeffreys, Ms.), Monts. *Mediterranean.*
S. pellucida, Monts. is a synonym.
S. PETITII, Fischer. (Not a Skenea?) *West Indies.*
S. CORNUELLA, A. Ad. *Japan.*

Family *CHORISTIDÆ.*

Genus CHORISTES, Carpenter. 1872.

C. ELEGANS, Carp. Pl. 61, fig. 3.

Thin, fragile, moderately umbilicated, epidermis thin, caducous,

smooth; whorls 4–5, very convex, with deep suture; lip simple, everted partially over the umbilicus. Length, 6 mill.

Off Martha's Vineyard, Mass.; 255 fms.

Recent specimens agree well in form and structure with the above named Canadian post-pliocene fossil; they are, however, somewhat larger, and thinner, and Verrill has accordingly given them the varietal name of TENERA.

Family *HOMALOGYRIDÆ.*

Genus HOMALOGYRA, Jeffreys. 1867.

H. ATOMUS, Phil. Pl. 61, figs. 4–6.

Discoidal, planorbiform, very widely umbilicated, spire depressed rather thin, semipellucid, smooth, slightly arcuately striate, somewhat shining; whorls 4, convex, rapidly enlarging, with deep suture; lip thin, simple. Diam. 1 mill.

Europe.

It is *Skenea nitidissima*, Forbes and Hanley, *H. simplex*, Costa. vars. *pallida* and *polyzona*, Brusina, and Var. *vitrea*, Duprey.

H. ROTA, Forbes and Hanley. Pl. 61 fig. 7.

Discoidal, flat above and concave below, very smooth, subpellucid, shining, with short radiating ribs above and below, enlarging and curving from the sutural line, and not extending to the periphery, whorls 3, convex, with deep suture. Diam. 5 mill.

Europe.

H. pulchella, and *H. paucicostata* Costa, and *Adeorbis costatus*, Weink. are synonyms.

H. FISCHERIANA, Monts. Pl. 61, figs. 8, 9.

Planorbiform, discoidal, fulvous, with three spiral brown lines; whorls 4, with slight, numerous, incremental striæ.

Diam. 1 mill.

Mediterranean Sea.

H. DENSICOSTATA, Jeffreys. Pl. 61, figs. 10, 11.

Planorbiform, semitransparent, glossy, nearly flat above, concave below, with close-set incremental striæ, finally becoming microscopic; whorls 4, rapidly increasing, the last one with a central carina on the upper and lower surfaces, and another on the periphery; suture narrow, but excavated. Diam. 1·87–3 mill.

Off Newfoundland, 1622 fms! *Cape Hatteras, N. C.* 7–17 fms.

The last locality is for *Skenea trilix*, Bush, which appears to me to be a better grown condition of Jeffreys' species.

H. CANCELLATA, Krauss. Pl. 61, figs. 12–14.

Planorbiform, flat above, concave and widely umbilicated below, thin, white, distinctly cancellated; whorls 5, convex, the last ventricose, periphery subcarinate. Diam. 2·25 mill.

Algoa Bay, So. Africa.

INDEX AND SYNONYMY.

RISSOIDÆ, JEFFREYSIIDÆ, SKENEIDÆ, Etc.

PAGE.

Aberrans (Rissoa), C. B. Ad. Contrib. Conch., p. 113, 1850, . 369
Abjecta (Rissoa), Watson. Zool. Proc., p. 385, t. 36, f. 23, 1873, ... 353
Abnormis (Rissoina), Nevill. Journ. Asiat. Soc. Bengal, xliv, p. 100, t. 8, f. 23, 1875, ... 391
Abyssicola (Rissoa), Forbes. Brit. Moll., p. 86, t. 78, f. 1. = R. Testæ, Arad. and Magg. var. 368
Abyssicola (Rissoa), Sars. Moll. Arct. Norv. 176. = R. subsoluta, Aradas. 368
Acicula (Rissoa), Desm. Bull. Soc. Phil. Paris, viii, t. 1, f. 3, 1814. = R. auriscalpium, Linn. 332
Acinopsis, Monts. Nomenc. Conch. Medit., 63, 1884, . 319, 365
Acinus, Monts. Nomenc. Conch. Medit., 62, 1884. = Alvania, Risso. 319
Acme, H. & A. Adams. Gen. Rec. Moll., i, 330, 1854. = Zippora, Leach. 316
Actonia, Monts. Nomencl. Conch. Medit., 61, 1884, . 319, 368
Aculeus (Rissoa), Gould. Invert. Mass., p. 266, f. 172, . . 347
Acuminata (Alvania), Gould. Proc. Bost. Soc. Nat. Hist., vii, p. 402, 1860, ... 365
Acuta (Rissoa), Desm. Bull. Soc. Phil. Paris, t. 1, f. 4, 1814. = R. auriscalpium, Linn. 332
Acutelirata (Rissoa), Carpenter. Proc. Cal. Acad. Sci., 1865, p. 217, ... 361
Adamsiana (Rissoina), Weink. Conch. Cab., p. 67, t. 15a, f. 4, 18—, ... 386
Aëdonis (Onoba), Watson. Challenger, xv, p. 600, pl. 45, fig. 5, 348
Aemula (Alvania), Monts. Enum., p. 26, ... 365

PAGE.
Aemula (Rissoa), Granata. = R. semistriata, Mont. (?) . 352
Æreus (Turbo), Adams. Trans. Linn. iii, p. 65, t 13, f. 29, 30, 1797. = Rissoa parva, DaCosta, ... 332
Affinis (Rissoa), Jeffreys. Zool. Proc., p. 124, t. 9, f. 8, 1884, . 347
Affinis (Rissoina), C. B. Ad. Bost. Proc., p. 6, 1845. = R. abbida, C. B. Ad. 388
Affinis (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 212, pl. 2, fig. 10, ... 389
Agnewi (Rissoa), Tenison Woods. Proc. Roy. Soc. Tasm., 1876, p. 152, ... 368
Alaskana (Alvania castanea, Möll. var.), Dall. Proc. U. S. Nat. Mus., p. 300, pl. iv, fig. 9, ... 349
Alata (Rissoa), Menke. Synopsis, p. 138, 1830. = R. decussata, Mont. 385
Alba (Rissoa Jan-Mayeni, Friele, var.), Friele. Nyt Mag., f. Natur. 338
Albella (Rissoa), Lovén. Ind. Moll. Scand., p. 24, 1846, . 334
Albescens (Barleeia rubra, var.) Requien. 392
Albida (Rissoina), C. B. Ad. Bost. Proc., p. 6, 1845, . . 388
Albolirata (Rissoa), Carp. Ann. & Mag. xiii, p. 476, 1864, . 350
Albugo (Rissoa), Watson. Zool. Proc., p. 379, t. 35, f. 17, 1873, 353
Albulus (Turbo), Ad. Trans. Linn. iii, p. 65, t. 13, f. 17, 18, 1797. = Rissoa parva, DaCosta. 332
Albus (Turbo), Donovan. Brit. Shells. = Rissoa costata, Adams. 336
Alderi (Jeffreysia), Carp. Mazat. Cat., 362, 1857, . . . 396
Alderi (Rissoa), Jeffreys. Ann. & Mag. iii, p. 127, t. 5, f. 5, a–c, 1858. = R. soluta, Phil. var. 356
Aleutica (Onoba), Dall. Proc. U. S. Nat. Mus., 1886, p. 306, pl. 3, fig. 11, ... 345
Algeriana (Rissoa), Monts. Journ. de Conch., p. 34, t. 3, f. 5, 1877, ... 333
Alleryana (Rissoa), Aradas & Benoit. Conch. Viv. Sicil., p. 211, t. 4, f. 11, ... 354
Alvania, Risso. Hist. Nat. Eur. Merid. iv, 146, 1826, . 319, 359
Alvearium (Cingula), Watson. Challenger Rept. xv, p. 605, pl. 46, fig. 1, ... 343
Alvinia, Monts. Nomenc. Conch. Medit., 60, 1884, . 319, 366
Amabilis (Setia), Monts. En. & Sin., p. 27. ?= R. pulcherrima, Jeffreys. 352
Ambigua (Rissoa), Brugn. Misc. Malacol., p. 9, fig. 14. = R. Alleryana, Ar. & Ben. 354
Ambigua (Rissoina), Gld. Bost. Proc., p. 118, 1849, . . 371
Amblia (Rissoa), Watson. Challenger Rept. xv, p. 590, pl. 44, fig. 8, ... 333
Amethystina (Rissoa), Renier. = R. violacea, Desm. . . 330

PAGE.
Ammonicerina, Costa. Microd. Medit., 67, 1864.
= Homalogyra, Jeffr. 324
Amphithalamus, Carp. Ann. Mag. N. Hist. xv, 181, 1865, . 317, 339.
Amphorula (Rissoa melanostoma, Req. var.), Bregnone Mss . Il Nat. Sicil., iii, p. 139, ... 326
Anabathron, Frauenf. Zool. Novara Exped. ii, 13, 1867, 317, 341
Anatasia, Gist. Naturg., 169, 1848. = Rissoa, Freminville. 315
Andamanica (Rissoina), Weink. Conch. Cab., p. 75, t. 15, b. f. 6, ... 386
Angasi (Rissoina), Pse. Amer. Journ. Conch. vii, p. 20, 1872.
= R. flexuosa, Gould. 381
Angeli (Rissoa), Tenison Woods. Proc. Roy. Soc. Tasmania, 1876, p. 153, ... 358
Angulata (Rissoa), Jeffreys. Zool. Proc., p. 119, t. 9, f. 5, 1884, 334
Angulata (Rissoina), Jick. Jahrb. Mal. Gesell. ix, p. 369, 1882, ... 375
Anguliferens (Rissoa), Folin. Fonds de la Mer. i, p. 134, pl. xx, fig. vi, ... 343
Angustissima (Rissoa membranacea, var.), Weink. Conch. Cab., p. 102, ... 329
Annulata (Rissoa), Dunk. Mal. Blatt. vi, p. 235, 1860.
= R. trochlearis, Gould. 394
Annulata (Rissoina), Hutton. N. Zealand Journ. Science, ii, p. 173, 1884, ... 387
Antoni (Rissoina), Schwartz. Familie Rissoiden, p. 99, f. 63, 1860, ... 388
Apicina (Cingula), Verrill. Trans. Conn. Acad. vi, p. 183, pl. 32, fig. 8, ... 357
Apicina (Rissoa similis, Scacc. var.), Monts. Il Nat. Sicil. iii, p. 139, ... 327
Apiculata (Rissoa), Danilo & Sand. Elenco Nom., p. 54, 1856. = R. silmilis, Scacc. 327
Apicularia, Monterosato. Nomen. Conch. Medit., 56, 1884, . 315, 327.
Approximata (Rissoa), Petterd. Journ. of Conch., 1884, p. 138, ... 368
Approxima (Rissoina), Petterd. Journ. of Conch., 1884, p. 141, ... 392
Arata (Rissoa), Phil. Zeitsch. für Malak., p. 167, 1848, . 368
Arata (Rissoa), Risso. Hist. Nat. Eur. Merid. iv, 16, 1826.
= R. similis, Scacc. 327
Arctica (Rissoa), Lovén. = R. saxatilis, Möller. . . . 347
Arenaria (Rissoa), Mighels & Adams. Bost. Journ. Nat. Hist., 1842, p. 49, pl. iv, fig. 24, ... 347
Arenarius (Turbo), Mat. & Rack. Linn. Trans. viii, p. 209.
= Rissoina decussata, Mtg. 347, 385

PAGE.
Areolata (Rissoa), Stimpson. Shells of New England, p. 35, 1851, ... 361
Artensis (Rissoa), Montrouz. Journ. de Conch. xx, p. 364, t. 4, f. 5, 1872. = R. spirata, Sowb. 388
Aspera (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 126, t. 22, f. 6. = R. lineata, Risso, var. 360
Asperulata (Dunkeria), Adams. Ann. & Mag. Nat. Hist., 120, 1868, ... 396
Asperula (Rissoa), Brugn. Kuster, Monog., 179. = R. Testæ, Aradas & Magg. Jno. 368
Assimilis (Rissoa), Jick. Jahrb. Mal. Gesell. ix, p. 368, 1882, 369
Asturiana (Alvania), Fischer. Act. Soc. Linn. Bord. xxix, 1869; Fonds de la Mer., t. 2, f. 5, ... 352
Atkinsoni (Rissoa, Cingula), Tenison Woods. Proc. Roy. Soc. Tasm., 1876, p. 153, ... 355
Atomaria (Cingula?), Gould. Proc Bost. Soc. Nat. Hist. vii, p. 403, 1860, ... 346
Atomus (Ammonicerina), Ph. Wiegm. Arch., 1841, . . 399
Atropupurea (Rissoa), Dunker. Frauenf. Novara. Exp., p. 13, t. 2, f. 21, 1866, ... 355
Aurantiaca (Rissoa), Brusina. Moll. Dalm., 28. = Barleeia rubra. 392
Aurantiaca (Rissoa), Watson. Zool. Proc., p. 367, t. 34, f. 3, 1873 326
Auberiana (Rissoa), d'Orb. Moll. Cuba, ii, p. 22, t. 11. f. 34–36, 1853, ... 337
Auriscalpium (Turbo), Linn. Syst. Nat. Ed. xii, p. 1240, 1757, ... 316, 331
Aurita (Rissoa), Monts. Journ. de Conch. xxv, p. 35, t. 3, f. 7, 335
Aurivillii (Alvania), Dall. Proc. U. S. Nat. Mus., 1886, p. 309, pl. iv, fig. 8, ... 349
Australiæ (Rissoa), Dunker. Frauenf. Novara Exped., p. 14, t. 2, f. 23, 1866, ... 344
Australis (Rissoa), Sowb. Conch. Icon., sp. 123, . . . 384
Australis (Setia), Watson. Challenger Rept. xv, p. 608, pl. 45, fig. 1, ... 356

Badia (Alvania), A. Ad. Ann. & Mag. viii, p. 300, 1861, . 365
Badia (Rissoa), Petterd. Journ. of Conch., 1884, p. 138, . 368
Badia (Scrobs), Watson. Challenger Rept. xv, p. 612, pl. 46, fig. 3, ... 339
Balteata (Cingula), Manzoni. J. C., 1868, p. 167, t. 10, fig. 7, 342
Balteata (Rissoina), Pease. Amer. Journ. Conch. v, p. 72, 1870, 385
Barleeia, Clark. Brit. Mar. Moll., 391, 1855, . . 321, 392
Baxteriana (Rissoa), Nevill. Journ. Asiat. Soc. Bengal, i, pt. 2, p. 161, 1881, ... 376
Bayntoni (Rissoa), Beddome. Proc. Roy. Soc. Tasmania, 1882, p. 168, ... 365

PAGE.
Beanii (Rissoa), Forbes & Hanley. Brit. Moll. iii, t. 78, f. 1. = R. reticulata, Mont. 361
Bella (Rissoa), A. Adams. Proc. Zool. Soc., 1851, p. 267, . 368
Bellardii (Rissoina), Issel. Mal. Mar Rosso, 1869. = R. miranda, A. Ad. 391
Bellula (Rissoina), A. Ad. Zool. Proc., p. 266, 1851, . . 383
Benjamina (Rissoa), Monts. Nomenc., p. 66, . . . 352
Benzi (Rissoa), Aradas & Benoit. Conch. Viv., p. 195. = R. albella, Loven. 334
Bertholetti (Rissoa), Andouin. Expl. Plates. Savig. Descr. Egypt, t. 4, f. 2. = R. plicata, A. Ad. 375
Bicingulata (Rissoa), Seguenza. Rendic. Acad. Nap., 1871, p. 1, 369
Bicollaris (Rissoina), Schwartz. Familie Rissoiden, p. 87, f. 50, 1860, ... 381
Bicolor (Rissoa), Petterd. Journ. of Conch., 1884, p. 1371, . 368
Bidentata (Rissoa), Phil. Archiv für Natur., p. 64, 1845. = R. tridentata, Mich. 389
Bifasciata (Jeffreysia), Carp. Mazat. Cat., 362, 1857, . . 396
Bifasciata (Setia), A. Ad. Ann. & Mag. viii, p. 136, 1861, . 359
Bivittata (Alvania Philippiana, Jeffreys, var.), Brusina. Moll. Dalmat., p. 27, ... 366
Bizonata (Setia), Nevill. Hand List, p. 128, 1885, . . 539
Blanfordiana (Rissoina), Nevill. Journ. Asiat. Soc. Beng. i, part 2, p. 162, t. 6, f. 16, 1881, ... 383
Bombayana (Fairbankia), Blanf. Ann. & Mag., p. 399, 1868. 393
Boryanus (Turbo), Delle Chiaje. Memorie, An. sans Vert. = Rissoa cimex, Linn. 360
Boscii (Rissoa), Payr. Moll. Corse., p. 112, t. 5, f. 15, 16, . 369
Brachia (Rissoa), Watson. Challenger Rept. xv, p. 599, pl. 45, fig. 8, ... 348
Brazieri (Rissoina [Setia]), Tenison Woods. Proc. Roy. Soc. Tasmania, 1875, p. 146, ... 355
Brocchii (Alvania), Weink. Conch. Mittelm. ii, p. 450. = Rissoa reticulata, Mont. 361
Browniana (Rissoina), d'Orb. Moll. Cuba, ii, p. 28, t. 12, f. 33, 35, 1853, ... 320, 390
Bruguieri (Rissoa), Payr. Cat. Moll. Corse, p. 113, t. 5, f. 17, 18, 1826, ... 370
Brutia (Rissoa), Tiberi, MSS, = R. Scillæ, Seguenza. . . 359
Brychia (Cingula), Verrill. Trans. Conn. Acad. vi, p. 179, pl. 32, fig. 9, ... 335
Bryerea (Rissoa), Mohrenstern (in part), Rissoiden, t. 5, f. 36a. = R. pseudobryerea, Nevill. 379
Bryerea (Rissoina), Mont. Test. Brit., p. 313, t. 15, f. 8, 1803, 379
Buccinoides (Rissoa), Desh. Exped. Morée. Moll., t. 19, f. 41–43. = R. Montagui, Payr. 360
Burdigalensis (Rissoina), d'Orb. Prodrom. iii, p. 30, 1852, . 375
Bureasensis (Rissoa), Sowb. Conch. Icon., f. 90, . . . 380

PAGE.
Cælata (Rissoina), A. Ad. Zool. Proc., p. 267, 1851.
= R. striata, Quoy. 386
Cælata (Rissoa), Monts. Nomencl. Conch. Medit., 74, 1884, . 355
Calathiscus (Rissoa), Mont. Test. Brit. Supp., t. 30, f. 5.
= R. cimex, Linn. 360
Calathus (Rissoa), Forbes & Hanley. Brit. Moll. iii, p. 80, t. 78, f. 3, ... 360
Caledonica (Rissoa), Crosse. Journ. de Conch., p. 72, 1872, pl. 16, fig. 8, ... 317, 342
Caliginosa (Eatoniella), E. A. Smith. Ann. Mag. Nat. Hist. xvi, 1875, 71, ... 392
Callosa (Rissoa), Manzoni. Journ. de Conch., p. 166, t. 10, f. 3, 1868, ... 350
Canaliculata (Rissoa), Philippi. Jeffreys, Zool. Proc., 116, 1884. = R. Zetlandica, Mont. 338
Canaliculata (Rissoa), Sowb. (not Schwartz). Conch. Icon., f. 60. = R. subdebilis, Nevill. 376
Canaliculata (Rissoina), Schwartz. Fam. Rissoiden, p. 55, f. 18, 1860. = R. distans, Anton. 375
Canariensis (Rissoa), d'Orb. Moll. Canaries, p. 18, t. 6, f. 5–7, 18—, ... 360
Cancellata (Rissoa), Desm. Bull. Soc. Phil., t. 1, f. 5, 1814.
= R. cimex, Linn. 360
Cancellata (Rissoa), Petit. Jour. de Conch. iii, 83.
= R. lactea, Mich. 365
Cancellata (Rissoina), Phil. Zeitsch. für Malak., p. 127, 1847, 381
Cancellatum (Solarium), Krauss. Die Sudafrik. Moll., p. 95, t. 5, f. 29, 1848, ... 400
Cancellatus (Turbo), (DaCosta), Jeffreys. Brit. Conch. iv, p. 8, v, t. 66, f. 3. = R. crenulata, Mich. 365
Candida (Dunkeria), A. Ad. Ann. & Mag. viii, 1861, p. 136, 396
Candida (Rissoina), Brown. Illust. Conch., p. 11, t. 9, f. 75, 1842. = R. Chesneli, Mich. 380
Candida (Setia), A. Ad. Ann. Mag. N. Hist. viii, 136, 1861, 359
Candidus (Rissoa), Brown. Ill. Conch., p. 15, t. 1, f. 9.
= R. striata, Mont. 347
Cardinalis (Rissoina), Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 368, ... 392
Caribæa (Alvania), d'Orb. Moll. Cuba, ii, p. 21, t. 11, f. 31–33, 1853, ... 363
Caribæa (Rissoa), Monts. Nuov. Rivista, 27.
= Alv. subareolata, Monts. 363
Carinata (Rissoa), Aradas. Jeffreys, Zool. Proc., 116, 1884.
= R. Zetlandica, Mont. 338
Carinata (Rissoa), Mighels and Ads. Bost. Jour. Nat. Hist. iv, 348
Carinata (Rissoa), Phil. Moll. Sicil. i, p. 150, t. 10, f. 10.
= R. costata, Adams. 336

PAGE.

Carinatus (Turbo), DaCosta. Brit. Conch., 1778.
= Rissoa striatula, Mont. 367
Carpenteri (Rissoa), Weink. Conch. Cab., p. 192, . . . 365
Castanea (Rissoa), Möller. Ind. Moll. Grœnl., p. 9, 1842, . 349
Castanella (Alvania), Dall. Proc. U. S. Nat. Mus., 1886, p. 306, pl. iii, fig. 5, ... 349
Catesbyana (Rissoina), d'Orb. Moll. Cuba, ii, p. 24, t. 12, f. 1, 3, 1842. = R. Chesneli, Mich. 380
Cazini (Rissoa), C. Velain. Archiv. Zool. Exper., 1877, p. 114, pl. 3, fig. 15, ... 344
Cerasina (Rissoa), Brusina. Contrib. Faun. Dalmat., 19, 74, 1866. = R. parva, DaCosta. 332
Ceratia, H. & A. Adams. Ann. Mag. N. Hist. x, 358, 1852, 318, 351
Cerinella (Onoba), Dall. Proc. U. S. Nat. Mus., 1886, p. 306, pl. 84, fig. 12, ... 345
Cerithiiformis (Rissoa), Dkr. Cat. Mus. Godeff. iv, p. 75, . 384
Cerithina (Fenella), Phil. Zeitsch. für Malac., p. 34, 1849, . 395
Ceylonica (Rissoina turricula, var.), Nevill. Hand List, p. 30, 1885, ... 377
Cheilostoma (Rissoa), Tenison Woods. Proc. Roy. Soc. Tasmania, 1876, p. 152, ... 366
Chesnelii (Rissoa), Mich. Desc. Gen. Rissoa, p. 15, f. 23, 24, 380
Choristes, Carpenter. Canad. Nat. vi, 392, 1872, . . 324, 398
Cimex (Turbo), Donovan (not Linn.). Brit. Shells, i, t. 2, f. 1. = Rissoa crenulata, Mich. 365
Cimex (Turbo), Linn. Syst. Nat. Ed. xii, p. 1233, . . 359
Cimicoides (Rissoa), Forbes. Brit. Moll., Brit. Assoc., 1843, . 362
Cincta (Rissoa), Angas. Zool. Proc., p. 114, 1867, pl. 13, fig. 22, ... 380
Cincta (Rissoa), Dkr. Schmeltz, Cat. Mus. Godeff. iv, p. 75. = R. ambigua, Gld. var. 371
Cingilla, Monts. Nomencl. Conch. Medit., 67, 1884.
= Cingula, Fleming. 318
Cingillus (Turbo), Montagu. Test. Brit. ii, p. 35, . . . 342
Cingula, Fleming. Brit. Anim., 297, 305, 1828, . . 318, 342
Cingulata (Rissoa), Ph. Enum. Moll. Sicil. i, 152; ii, 138, t. 23, f. 14, ... 350
Cingulina, Monts. Nomencl. Conch. Medit., 66, 1884, . 318, 356
Circinata (Rissoa), A. Ad. Ann. & Mag. viii, 1861, p. 137, . 365
Clandestina (Rissoa), C. B. Ad. Panama Shells, p. 177, 1852, ? = R. Woodwardi, Cpr. 372
Clathrata (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 223, t. 28, f. 20. = R. hispidula, Monts. 363
Clathrata (Rissoina), A. Ad. Zool. Proc., p. 265, 1851, . . 381
Clathratula (Alvania), A. Ad. Ann. & Mag. Nat. Hist. vii, 1861, p. 137, ... 365
Cleopatræ (Folinia), Folin. Fonds de la Mer. i, p. 267, . 338

PAGE.
Cochlearella (Rissoa), Basterot. Mem. Soc. Geol. Bord., p. 37, 1825. = Rissoina decussata, Mont. 385
Communis (Rissoa), Forbes. Mal. Monensis, p. 17. = R. striata, Mont. 347
Concatenata (Rissoina), Tenison Woods. Proc. Roy. Soc. Tasm., 1876, p. 155, ... 392
Concinna (Alvania), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 137, ... 365
Concinna (Cingula?), C. B. Adams. Contr. Conch., p. 70, 1850, ... 346
Concinna (Hyala), A. Adams. Ann. Mag. N. H. vi, 123, 1870, 351
Concinna (Microstelma), A. Ad. Ann. & Mag. vi, 1870, p. 121. = Rissoina spirata, Sow., juv. 379, 388
Concinna (Rissoa), A. Ad. Zool. Proc., p. 266, 1851, . . 386
Concinna (Rissoa), Monts. Test. Nuov. Sicil., p. 8, f. 2. = Cingula benjamina, Monts. 352
Concinna (Rissoina), Sowb. (not A. Ad.). Conch. Icon., sp. 9. = R. pseudoconcinna, Nevill. 391
Concinnata (Rissoa), Jeffreys. Ann. & Mag., p. 396, t. 16, f. 2, 1883, ... 356
Conica (Cingula?), C. B. Adams. Contr. Conch., 1850, p. 70, 346
Conica (Rissoa), Perier. Fonds de la Mer. i, p. 11, pl. 1, fig. 4, 342
Conifera (Rissoina), Montagu. Test. Brit., p. 314, t. 15, f. 2, 1803, ... 370
Coniformis (Rissoa abyssicola, var.), Jeffr. Ann. & Mag., p. 13, 1870. = R. Testæ, Aradas & Magg. 368
Coniformis (Rissoina), Schwartz. Kuster. = R. Montagui, Weink. 370
Consociella (Alvania), Monts. Il Nat. Sicil. iii, p. 159, . 367
Contabulata (Anabathron), Fraueuf. Voy. Navara, 13, 1867, 341
Contabulata (Rissoina), Mörch. Mal. Blatt. vii, p. 68, 1860, . 392
Contorta (Rissoa), Jeffreys. Ann. & Mag. Nat. Hist. xvii, 1856, p. 183, ... 340
Convexior (Rissoina Montrouzieri, var.), Nevill. Hand List, p. 91, 1885. = R. spirata, Sowb. 388
Cooperi (Rissoa), Tryon. Am. Jour. Conch. i, 222, t. 22, f. 13. = Amnicolidæ. 369
Corena, A. Adams. Ann. Mag. N. Hist. vi, 122, 1870, . 317, 339
Coriacea (Rissoa?), Manzoni. Jour. de Conch. xvi, p. 166, t. 10, f. 6, ... 358
Corilea (Rissoa), d'Orb. Reeve, Conch. Icon., f. 24. = R. Caribæa, Orb. 364
Cornea (Rissoa), Loven. Ind. Moll. Scand., p. 24, 1846. = R. membranacea, Adams. 329
Cornuella (Skenea), A. Ad. Ann. & Mag. Nat. Hist. v, 1860, p. 412, ... 398
Coronata (Rissoa), Brusina. Moll. Dalmat., 26. = Alvania lineata, Risso, var. 360

PAGE.
Coronata (Rissoina), Recluz. Schwartz, Rissoina, p. 109.
= R. tridentata, Mich. 389
Cossuræ (Setia), Calcara. Mon. Spir. et Succ., 10.
= Rissoa vexillata, Brusina. 356
Costata (Homalogyra), Weink. Conch. Mittelm., 264.
= H. rota, Forbes & Hanley. 399
Costata (Rissoa), Adams. Linn. Trans. viii, t. 13, f. 13, 14.
= R. exigua, Desm. 336
Costata (Rissoa), Desm. Bull. Soc. Philom. Paris, p. 7, t. 1, f. 1. = R. variabilis, Muhl. 325
Costata (Rissoina), A. Ad. Zool. Proc., p. 266, 1851, . . 376
Costatogranosa (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 211, pl. 2, fig. 7, ... 373
Costulata (Alvania), S. Wood. Jeffreys, Zool. Proc., 121, 1884.
= Alv. subareolata, Monterosato. 363
Costulata (Rissoa), Alder. Ann. & Mag. xiii, p. 324, t. 8, f. 8, 9, 1844. = R. Guerini, Recluz, var. 326
Costulata (Rissoa), Pease. Amer. Journ. Conch. iii, p. 295, t. 24, f. 28, 1867, ... 372
Costulata (Rissoa), Risso. France Merid., p. 119, 1826.
= R. variabilis, Muhl. 325
Costulata (Rissoina), Dkr. Mal. Blatt. vi, p. 235, 1860, . . 374
Costulifera (Rissoina), Pse. Journ. de Conch., p. 382, 1862.
= R. ambigua, Gld. 371
Costulina (Rissoa), Sismondi. Synopsis, p. 53, 1847.
= R. decussata, Mont. 385
Costulosa (Alvania lineata, Risso, var.), Risso. Eur. mérid. iv, 142, ... 360
Costulosa (Alvania), Schwartz, teste Weinkauff.
= Rissoa aspera, Phil. 360
Crassa (Rissoina), Angas. P. Z. S., 1871, p. 17, pl. 1, fig. 16.
= R. Rissoi, Audouin. 378
Crassicosta (Rissoa), C. B. Adams. Proc. Bost. Soc. Nat. Hist., 1845, p. 6, ... 369
Crassilabrum (Rissoa), Garrett. Proc. Cal. Acad. Nat. Sc., 1857, p. 102. = R. tridentata, Mich. 389
Craticulata (Dunkeria), A. Ad. Ann. & Mag. vi, 1860, . . 396
Crebrisulcata (Rissoa), Sowb. Conch. Icon., sp. 56, . . 384
Crenulata (Rissoa), Mich. Descr. Gen. Rissoa, p. 15, f. 1, 2, 1830, ... 365
Cretacea (Rissoina), Tenison Woods. Proc. Linn. Soc. N. S. Wales, ii, p. 265, ... 392
Crispa (Rissoa), Watson. Zool. Proc., p. 369, t. 34, f. 6, 1873, 338
Cristallinula (Rissoa), Manzoni. Journ. de Conch., p. 165, t. 10, f. 4, 1868, ... 350
Crystallina (Fenella), Carpenter. Ann. & Mag. Nat. Hist. xiii, p. 477, 164, ... 395

PAGE.

Crystallina (Rissoa), Brown. Conch. G. Brit., 13.
= R. vitrea, Mont. 351
Crystallina (Rissoa?), Garrett. P. A. N. S. Phila., 1873, p. 216,
pl. 2, fig. 25 (not 24), ... 364
Cumingii (Rissoa), Reeve. Sowb. Conch. Icon. Sp. 4.
= R. striata, Quoy. 386
Cumingi (Rissoina), H. & A. Ad. Genera, i, p. 327, t. 35, f.
1, 1854. = R. gigantea, Desh. 388
Curta (Rissoina), Sowb. Mohrenstern, Rissoina, 107.
= R. tridentata Mich. 389
Curtisii (Rissoina), E. A. Smith. Zool. "Alert" Exped., p. 63,
pl. v, fig. M. = R. Australis, Sowb. 384
Cyclostomata (Rissoa), Recluz. Rev. Zool. Cuv., p. 104, 1843.
= R. Zetlandica, Mont. 338
Cyclostoma (Rissoa), Tenison Woods. Proc. Roy. Soc. Tasm.,
1876, p. 152, ... 344
Cylindracea (Rissoa), Krynicki. Bull. Natur. de Moscow,
No. ii, p. 60, 1837. ? = R. elata, Phil. 331
Cylindracea (Rissoina), Tenison Woods. Proc. Linn. Soc. N.
S. Wales, ii, p. 266, ... 392
Cylindrica (Jeffreysia), Jeff. Ann. & Mag. Nat. Hist. xvii,
1856, p. 184, ... 397

Dædala (Microstelma), A. Ad. Ann. & Mag. xi, 1863, p. 348, 379
Dardania, Hutton. Trans. N. Zeal. Inst. xiv, 147, 1882, 323, 397 .
Debilis (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 212,
pl. 2, fig. 9, ... 372
Decorata (Rissoa), Phil. Zeitsch. für Malak., p. 97, 1846, . 326
Decurtata (Rissoa similis, Scacc. var.), Monts. Il Nat. Sicil.
iii, p. 139, ... 327
Decussata (Rissoa), Menke. Synopsis, 1830.
= Rissoina Bruguieri, Payr. 370
Decussata (Rissoina), Montagu. Test Brit., p. 399, 1803, . 385
Deformis (Rissoa), Sowb. Genera of Shells, No. 40, p. 20,
1820–24. = R. spirata, Sowb. 388
Delicata (Onoba), Phil. Zeitsch. für Malak., p. 34, 1849, . 350
Deliciosa (Rissoa), Jeffreys. Zool. Proc., p. 121, t. 9, f. 7,
1884, ... 328
Delphinoidea, Brown. Illust. Conch. Gt. Brit., 1827.
= Skenea, Fleming. 323
Densecostata (Homalogyra), Jeffr. Zool. Proc., p. 129, t. 10,
f. 1, 1884, ... 399
Dentata (Rissoa), Dan. & San. in Sched. and in Coll.
= R. monodonta, Brusina. 331
Denticulata (Rissoa), Mohrenstern. Rissoiden, p. 126, t. 3, f.
23. = R. plicata, A. Ad. 375
Depauperata (Rissoa cimex, var.), Monts. Journ. de Conch.,
p. 34, 1887, ... 360

PAGE.

Depicta (Rissoa), Manzoni. Journ. de Conch., p. 246, t. 10, f. 4, 1868. = R. callosa, Manzoni. 350
Depicta (Rissoa), Weinkauff. Küster, Conch. Cab., 152. ? = R. pulcherrima, Jeffreys. 352
Depressa (Helix), Mont. = Skenea planorbis, Fabricius. . 398
Deshayesiana (Rissoa), Recluz. Rev. Zool. Cuv., 1843, Conch. Icon., f. 62. = R. Deshayesiana, Schwartz. . . . 382
Deshayesi (Rissoina), Schwartz. Familie Rissoiden, p. 91, f. 55, 1860, ... 382
Desmaresti (Rissoa), Andouin. Descr. Egypt, p. 171, t. 3, f. 21, 1826, ... 330
Desmarestii (Rissoa), Recluz. Rev. Zool. Cuv., p. 9, 1843. = R. variabilis, Muhlf. 325
Diaphana (Rissoa), Alder. Ann. & Mag. xiii, 1844. = Jeffreysia glabra, Brown. 396
Dictyophora (Rissoa), Phil. Moll. Sicil. ii, p. 128, t. 23, f. 11, 366
Dictyophora (Rissoa), Weink. (not Phil.). Journ. de Conch. x, p. 339. = R. Weinkauffi, Schwartz. 366
Didyma (Rissoa), Watson. Challenger Rept. xv, p. 594, pl. 44, fig. 1, ... 362
Diemenensis (Rissoa), Petterd. Journ. of Conch., 1884, p. 138, ... 368
Dilecta (Rissoa), Monterosato. Nuova Rivista, p. 27, . . 369
Dimidiata (Rissoina), Jickeli. Jahrb. Mal. Gesell. ix, p. 368, 1882, ... 386
Discors (Pyramis), Brown. Ill. Conch., p. 14, t. 9, f. 31. = R. striata, Mont. 347
Distans (Rissoina), Anton. Verzeichniss, p. 62, 1839, . . 375
Divisa (Skenea), Forbes & Hanley. Brit. Moll. iii, 165. = S. serpuloides, Mtg. 398
Doliolum (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 122. t. 23, f. 19, ... 335
Dolium (Rissoa), Nyst. Coq. Foss. de Belg., p. 417, 1843, . 332
d'Orbignyi (Rissoa), Andouin. Expl. Savigny's Egypt, 171, 1827, ... 327
d'Orbignyi (Rissoina), A. Ad. Zool. Proc., p. 265, 1851, . 388
Drummondi (Zippora), Leach. Synopsis, 169. = Rissoa auriscalpium, Linn. 332
Dubia (Rissoa), Petterd. Journ. of Conch., 1884, p. 137, . 368
Dubiosa (Rissoina), C. B. Ad. Contrib. Conch., p. 114, 1850. = Rissoina Dunkeri, Pfr. 374
Duclosi (Rissoina), Montrouz. Souverbie, Journ. de Conch. xiv, p. 257, t. 9, f. 8, ... 378
Dunkeri (Rissoa), Pfr. Weinkauff, in Küster, p. 27. = R. dubiosa, C. B. Ad. 375

Eatonia, E. A. Smith. Ann. Mag. N. Hist., 70, 1875. = Eatoniella, Nevill. 321

PAGE.
Eatoniella, Dall. Bull. N. S. Nat. Mus. iii, 42, 1876, . 321, 391
Ecostata (Rissoa violacea, var.), Jeffreys. Nevill, Hand List, 101, ... 330
Edwardiensis (Jeffreysia), Watson. Journ. Linn. Soc. xii, p. 99, 1881, ... 397
Edwardiensis (Setia), Watson. Challenger Rept. xv, p. 610, pl. 45, fig. 11, ... 357
Efficata (Rissoina), Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 366, ... 392
Effusa (Rissoina), Mörch. Mal. Blatt. vii, p. 67, 1860, . . 374
Egregia (Onoba), A. Adams. Ann. & Mag. Nat. Hist. xi, 1863, p. 349, ... 350
Ehrenbergi (Rissoa), Phil. Moll. Sicil., p. 127, t. 23, f. 9, 1844, ... 315, 327
Elata (Rissoa), Phil. Moll. Sicil. ii, p. 124, t. 23, f. 3, . . 331
Electa (Rissoa), Monterosato. J. C., 1874, p. 261, . . . 367
Elegans (Alvania), Angas. Proc. Zool. Soc., 1877, p. 174, pl. 26, fig. 15, ... 364
Elegans (Choristes), Carp. Canad. Nat. vi, 392, . . . 398
Elegans (Rissoa), A. Adams. Proc. Zool. Soc., 1851, p. 267, . 368
Elegans (Rissoa), Brusina. Moll. Dalm., No. 19.
= R. Ehrenbergi, Phil. 327
Elegantissima (Rissoa), Sequenza, Mss. Monts. Nuova Riv., p. 27. = R. subsoluta, Aradas. 368
Elegantissima (Rissoina), d'Orb. Moll. Cuba, ii, p. 26, t. 12, f. 27–29, 1853, ... 374
Elegantula (Onoba), A. Adams. Ann. & Mag. Nat. Hist. viii, 1861, p. 136, ... 350
Elegantula (Rissoina), Angas. P. Z. S., 1800, p. 417, pl. 40, fig. 10. ?= R. striata, Quoy. 386
Elongata (Fenella), Watson. Journ. Linn. Soc. xv, p. 249, 1881, ... 395
Elongata (Rissoa), Brusina. Moll. Dalmat., 17.
= R. oblonga, Desm. 331
Elongata (Rissoa), Phil. Enum. Moll. Sicil., t. 10, f. 16.
= Odostomia, Manual, viii, 346, ... 369
Emaciata (Rissoa), Mörch. Mal. Blatt. xxiii, p. 54, . . 369
Epidaurica (Cingula), Brus. Moll. Dalm., p. 29, t. 3, p. 10, . 341
Erythræa (Rissoa), Schwartz. Rissoiden, p. 163, t. 8, f. 59.
= R. Cerithiiformis, Dkr. 384
Erythræa (Rissoina), Philippi. Zeitsch. für Malak., p. 93, 1851, ... 382
Euchila (Rissoa), Watson. Challenger Reports, xv, 602, . 335
Eulimoides (Rissoa), C. B. Ad. Contrib. Conch., p. 115, 1850, 369
Eulimoides (Rissoina), A. Ad. Zool. Proc., p. 279, 1851.
= R. tridentata, Mich. 389
Europæa (Rissoa), Risso. Hist. Eur. Mérid., t. 9, f. 156.
= Turbo cimex, Linn. 360

PAGE.
Evanida (Rissoina), Nevill. Journ. Asiat. Soc. Beng. xliii, Pt. 2, p. 25, t. 1, f. 14, 1874, ... 386
Exarata (Rissoa), Stimpson. Bost. Proc. iv, 15; Shells of N. E., t. 1, f. 3. = R. arenaria, Migh. and Ads. . . . 347
Exasperata (Rissoina), Souverbie. Journ. de Conch. xiv, p. 259, t. 9, f. 10, ... 384
Excavata (Rissoa), Phil. Enum. Moll. Sicil., t. 10, f. 6. = Odostomia, Manual, viii, 355, ... 369
Excurvata (Alvania), Carp. Mazat. Cat., 359, 1857. = Fenella. 395
Exigua (Rissoa), Dkr. Mus. Godeff. iv, p. 75. ? = R. triticea, Pse. 380
Exigua (Rissoa), Mich. Gen. Rissoa, p. 16. = R. costata, Adams. 336
Exigua (Rissoa), Phil. Enum. Mol. Sic. ii, p. 125, n. 7, . 369
Exilis (Rissoa), Tryon. Amer. Journ. Conch. ii, p. 12, t. 2, f. 18, 1866, ... 345
Eximia (Rissoa), Jeffreys. = Odostomia, Manual, viii, 352, . 369
Expansa (Rissoina), Cpr. Ann. & Mag. xv, p. 399, 1865, . 392
Expansilabris (Rissoa auriscalpium, Var.) B. D. D. Moll. Roussillon, 276, ... 332

Fairbankia, Blanf. Ann. Mag. N. Hist. ii, 399, 1868, . 321, 393
Fasciata (Alvania) Tenison-Woods, Proc. Roy. Soc. Tasm. 152, 1876, ... 365
Fasciata (Rissoa) Angas. Proc. Zool. Soc. 1851, p. 264, . . 380
Fasciata (Rissoa) Req. Coq. Corse, 1848, p. 56. = Microsetia Cossurae, Calc. 365
Fasciata (Rissoina), A. Ad. Zool. Proc. p. 264, 1851, . . 370
Fayalensis (Rissoa) Watson. Challenger Rept. xv, p. 589, pl. 44, fig. 7, ... 328
Feddeniana (Fairbankia), Nevill. Journ. Asiat. Soc. Beng. 1881, ... 393
Fenella, A. Adams, Ann. Mag. N. Hist, ? 1860, . . 322, 394
Fenestrata (Alvania) Gould, Proc. Bost. Soc. Nat. Hist. vii, p. 402, 1860, ... 365
Fenestrata (Alvania), Krauss, Sudafrik, Moll. p. 86, t. 5, f. 20, 1848, ... 364
Fenestrata (Rissoina), Schwartz, Familie Rissoiden, p. 88, f. 51, 1860, ... 381
Ferruginea (Alvania), A. Ad. Ann. & Mag. viii, p. 138, 1861, 365
Ferruginea (Fenella) A. Adams. Ann. & Mag. Nat. Hist. 421, 1860, ... 396
Ficaratiensis (Pseudosetia) Brugnone. Misc. Malac. 1876, p. 21, ... 355
Filosa (Rissoa) Brusina. Fonds de la Mer. i, p. 260, pl. xxiv, fig. 1, ... 346

PAGE.
Filosa (Rissoa), Carp. Ann. & Mag. Nat. Hist. xii, p. 429, 1864, ... 365
Fimbriata (Rissoa), Souverbie. Journ. de Conch. p. 2, pl. 1, fig. 3, 1872, ... 378
Firmata (Rissoina), C. B. Ad. Panama Shells, p. 401, & 537, 1852, ... 374
Fischeri (Rissoa), Jeffreys. Zool. Proc. p. 113, t. 9, f. 1, 1884, 361
Fischeriana (Homalogyra), Monts. Journ de Conch. p. 274, t. 13, f. 1, 1869, ... 399
Flamia (Rissoa) Beddome. Proc. Roy. Soc. Tasmania. 1882, p. 169, ... 359
Flammea (Rissoa), Frauenf. Novara Exp. p. 12, t. 2, f. 18, 339
Flammea (Rissoa), Pease. Amer. Journ. Conch. iii, p. 297, t. 25, f. 33, 1867, ... 387
Flemingia, Jeffreys, 1884. = Manzonia, Brusina. . . . 316
Flexuosa (Rissoa), Gld. Bost. Proc vii, 1861, p. 400, . . 380
Flindersii (Rissoina) Tenison-Woods. Proc. Roy. Soc. Tasm. 1876, p. 154, ... 392
Floridana (Rissoa Catesbyana, d'Orb. var.) Mörch, Mal. Blatt. xxiii, p. 49, ... 380
Folinia, Crosse. Jour. de Conch. xvi, 218, 1868, . . 316, 338
Fortis (Rissoina), C. B. Ad. Ann. Nat. Hist. N. Y. v, p. 402, 1852, ... 371
Fragilis (Rissoa), Mich. Desc. Gen. Rissoa, p. 10, f. 9, 10, 1830. = R. membranacea, Ad. 329
Frauenfeldiana (Rissoa) Brusina. Moll. Dalm. p. 22, pl. 3, fig. 7, ... 226
Frauenfeldi (Rissoa), Schwartz. Voy. Novara p. 10, t, 2, f. 13, 340
Fremenvillei (Rissoa) Andouin. Expl. Pl. Savigny. 171, . 367
Freminvillei (Rissoa), Risso. Europ. Merid. iv, p. 141, f. 128. = R. cimex, Linn. 360
Fulgida (Fenella), C. B. Ad. Nevill, Hand List, 116, . . 395
Fulgida (Rissoa), Adams. Linn. Trans. iii, p. 254, 1800, . 354
Fulva (Rissoa), Mich. Desc. Gen. Rissoa, p. 12, f. 17, 18, 1830. = R. rubra, Adams. 392
Funiculata (Rissoina), Souverbie. Journ. de Conch. xiv, p. 256, t. 9, f. 7, ... 377
Fusca (Dunkeria), A. Ad. Ann. & Mag. vi, 1860, . . 396
Fusca (Alvania), Gould. Proc. Bost. Soc. Nat. Hist. vii, p. 403, 1860, ... 365
Fusca (Setia), Phil. Enum. Moll. Sicil, 1836, . . . 354

Galeodina, Monts. Nomencl. Conch. Medit. 65, 1884, . 319, 367
Galvagni (Rissoa) Aradas. = R. semistriata, Mont. (?) . 352
Gemmula (Rissoa), Fischer, Fonds de la Mer, t. 23, fig. 3, p. 51. ? = R. similis, Scacc. juv. 227
Gentilissiana (Rissoa), Sowb. in Reeve. Conch. Icon. Sp. 44. = Hydrobia Gentilsiana, Crosse. 369

PAGE.
Georgiana (Rissoa) Pffr. Naturhist. Mus. Hamburg, 1886, p. 92, t. 2, fig. 3, ... 346
Georgiana (Shenella) Pffr. Naturhist. Mus. Hamburg, 1886, p. 97, t. 2, fig. 6 a. b. 396
Gergonia (Rissoa) Chiereg, Ip. Con. 362
Gertrudis (Rissoina), Tenison-Woods. Proc. Roy. Soc. Tasmania, 1875, p. 147, ... 472
Gibber (Rissoa), Watson, Zool. Proc. p. 371, t. 34, f. 7, 1876, 336
Gigantea (Rissoina), Desh. Traite Elem. Conch. p. 77, f. 18, 20. 1848, ... 387
Glabra (Jeffreysia) Alder. Ann. Nat. Hist. xiii, 325; Brown, Ill. Conch. 13, ... 396
Glabrata (Cingula), Mühlf. Verh. Ges. Nat. Fr. Berlin, 1818, 340
Glabrata (Hyala) Phil. fide A. Ads. Ms. 351
Glabrata (Rissoa), Fleming. Brit. Anim. 308.
= R. vitræa, Mont. 351
Glabrata, Var. (Rissoa) Brusina. Monts. Nuov. Riv. 28.
= R. nitida, Brusina. 340
Glaphyra (Ceratia) Watson. Challenger Rept. xv, p. 601, pl. 45, fig. 6, ... 349
Globosa (Rissoa) H. Martin, Mss. Monts. Nat. Sicil. ii, 23,
= Cingulina obtusa, Cantr. 356
Globosa (Rissoa inconspicua, Alder. var.) Mörch. Viden. Meddel. Copenh. 1871, p. 120, ... 327
Globularis (Jeffreysia) Jeffreys. Forbes & Hanley, Brit. Conch. iv, app. 268, ... 397
Globulinus (Setia) Monts. Il Nat. Sicil. iii, p. 278, . . 359
Globulus (Rissoa), Möller, Ind. Moll. Groenl. p. 9, 1842, . 359
Goniostoma, A. Ad. Ann. Mag. N. Hist. v, 411, 1850; viii, 136, 1861, ... 368
Gougeti (Rissoa), Mich. Desc. Gen. Rissoa, p. 7, f. 7, 8, 1830, 369
Gracilis (Alvania) Angas. Proc. Zool. Soc. 1877, p. 174, pl. 26, fig. 16, ... 364
Gracilis, (Rissoa) A. Ad. Ann. & Mag. Nat. Hist. vi, 1878, p. 122, ... 368
Gracilis (Rissoa), Macgilliv. Moll. Aberdeen., p. 152.
= R. striata, Mont. 347
Gracilis (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 211, pl. 2, fig. 8, ... 273
Gracilis (Rissoina) H. Pease. P. Z. S. 1860, p. 438, . . 392
Gradata (Rissoa), d'Orb. Moll. Cuba. t, 11, f. 37–39, 1853, p. 23, ... 378
Gradatula (Rissoa) Mörch. Mal. Blatt. xxiii, p. 53. . . 369
Grandis (Rissoina), Phil. Zeitsch. für Malak. p. 127, 1847.
= R. striata, Quoy. 386
Granulata (Rissoa), Phil. Moll. Sicil., i, p. 153.
= R. cimex, Linn. 360

PAGE.

Granulata (Rissoa), Req. Coq. Corse. p. 56.
= R. suberenulata, Schwartz. 363
Granulosa (Rissoina), Pse. Journ. de Conch. x, p. 382, t. 13, f. 10, 1862, ... 383
Granulum (Rissoa) Philip. = R. semistriata, Mont. (?) . 352
Graphicus (Turbo), Brown. Mem. Werner. Soc. ii, p. 521, t. 24, f. 6. = Rissoa cingilla, Montagu. 342
Griegi (Setia) Fr. Jahrb. Mal. Gesell. 1879, p. 274, . . 359
Grisea (Rissoa) Martens. Sitzb. Berlin. 1885, p. 92, . . 349
Grossa (Rissoa), Mich. Desc. Gen. Rissoa, p. 8, f. 21, 22, . 331
Guerinii (Rissoa), Recluz, Rev. Zool. Cuv. p. 7, 1843, . . 326

Haliotiphila (Barleeia), Carp. Journ. de Conch. xii, p. 144, . 393
Hanleyi (Rissoina), Schwartz. Familie Rissoiden, p. 64, f. 28, 1860, ... 370
Harpa (Rissoa), Verrill. Proc. U. S. Nat. Mus. iii, p. 374, 1880, 336
Helicina (Skenea) Jeffr. Mss. Monts. Nat. Sicil. 22, 1885, . 398
Hemistomia, Crosse. Jour. de Conch. 72, 1872, . 317, 342
Hirta (Rissoa) Monts. Nomencl. Conch. Medit. 64, 1884, . 365
Hispidula (Rissoa) Monts. Nomenclatura p. 63, . . . 363
Homalogyra, Jeffreys. Brit. Conch. iv, 67, 1867, . . 324, 399
Honoluluensis (Rissoina) Watson. Challenger Rept. xv, p. 619, pl. 46, fig. 9, ... 373
Horrida (Rissoina), Garrett. P. A. N. S. Phila. p. 210, pl. 2, fig. 5, 1873, ... 383
Hungerfordiana (Rissoina), Nevill. Weink, Conch. Cab. t. 15a. f. 9, 1881, ... 383
Huonensis (Tatea) Tenison-Woods. Proc. Roy. Soc. Tasm. 1879, 32, ... 397
Hyala, H. & A. Adams. Ann. Mag. N. Hist. x, 358, 1852, 318, 351
Hyalina (Rissoa), Desm. Bull. Soc. Phil. Paris, p. 8, t. 1, f. 6. = R. rufilabris, Leach. 330
Hyalina (Rissoa?) Garrett. P. A. N. S. Phila. 1873, p. 217, pl. 2, fig. 24, (not 25) 358
Hydrophana (Rissoella), A. Ad. Ann. & Mag. vi, 332, 1860, 397
Hystrix (Rissoina), Souverbie. Journ. de Conch. xxv, p. 74, t. 1, f. 4. = R. nodicincta, A. Ad. 383

Imbricata (Barleeia) Watson. Challenger, xv ,p. 584, pl. 43, fig. 2, ... 393
Imbricata (Rissoina), Gld. Bost. Proc. vii, 1861, p. 400.
= R. trochlearis, Gld. var. 394
Impolita (Rissoa) Hutton. Cat. Mar. Moll. N. Zealand, p. 29, 1873. 393
Inca (Rissoa), d'Orb. Voy. Amer. Mer. p. 52, t. 53, f. 11–16, p. 395, ... 369
Incerta (Rissoa), Souverbie. Journ. de Conch. p. 53, t. 1, f. 4, 1872, 150, 1876, ... 372

PAGE.
Incidata (Rissoa), Frauenf. Novara Exped. p. 12, t. 1 f. 19, 339
Incompta (Rissoa) A. Gould. Proc. Bost. Soc. Nat. Hist. viii, p. 280, ... 369
Inconspicua (Rissoa) Alder. Ann. Mag. xiii, 323, . 327, 334
Inconspicua (Rissoina) Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 368, ... 392
Inclusa (Amphithalamus), Carp. Ann. & Mag. xv, 1865, p. 181, ... 340
Indica (Rissoina), Nevill. Hand List, p. 75, 1885. . . 374
Inermis (Rissoina) Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 367, ... 392
Inflata (Setia) Monts. Nomencl, 72. = R. fusca, Phil. Var. 354
Infrastricta (Rissoa) Garrett. P. A. N. S. Phila. 1873, p. 215, pl. 2, fig. 21, ... 378
Infratincta (Rissoa,) Garrett. P. A. N. S. Phila. 1873, p. 216, Pl. 2, fig. 22, ... 395
Infrequens (Rissoina), C. B. Ad. Panama Shells, p. 403, 1852, 385
Insenghæ (Rissoa), Calc. = R. punctura, Mont. . . . 337
Insignis (Rissoa), Ad. & Rve. Voy. Samarang, p. 53, t. 11, f. 20, 1850, ... 389
Insignis (Rissoa) Folin. Les Meleagrinicoles 48, 1867, . . 338
Insolita (Rissoa), Desh. Conch. Reunion, p. 63, t. 13, f. 15, 16, 1863. = R. miranda, A. Ad. 391
Interfossa (Rissoa), Nevill. Weink. in Küster, Conch. Cab. 160, ... 364
Interfossa (Rissoina) Carpenter. Proc. Cal. Acad. Sci. 1865, p. 217, ... 392
Intermedia (Rissoa), Aradas. Teste Monterosato. = R. cimicoides, Forbes. 362
Interruptus (Rissoa), Adams. Trans. Linn. Soc. v, t. 5, f. 20, 21, 1798, ... 332
Intorta (Rissoa), Monts. Enum. Conch. Medit. 26, 1872. = R. contorta Jeff. var. intorta. Monts. 340
Iravadia, Blanf. Jour. Asiat. Soc. Beng. 56, 1867, . 322, 393
Islandicax (Cingula) Friele. Nordske Nordhavn Exped. p. 28, pl. xi, figs. 8 & 9, ... 346
Isselia, Semper, Mss. Schmeltz, Cat. Mus. Godeffroy, v. = Isseliella, Nevill. 321
Isseliella, Nevill. Hand List Ind. Moll. 98, 1885, . . . 321

Janmayeni (Rissoa) Friele. Nyt Mag. 5, f. 4, 1878, . . 338
Janus (Rissoa), C. B. Ad. Panama Cat. p. 538, 1852, . . 387
Japonica (Rissoina), Weink. Conch. Cab. p. 65, t. 15a. f. 1, 18. = R. spirata, Sowb. 388
Jeffreysia, Alder. Forbes & Hanley, Brit. Moll. 1849, . . 396
Jeffreysi (Rissoa), Waller. Ann. & Mag. xiv, 3d. Ser. p. 136, 361
Jickelii (Rissoa), Weink., Conch. Cab. p. 78, t. 15c. f. 4, 1881. = R. Blanfordiana, Nevill. 383

PAGE.

Joenia (Rissoa) Ar. et Benoit. Monts., Nat. Sicil. iii, 280.
= Microsetia, Corsuræ. 356

Keilostoma, Desh. Anim. sans Vert. Bassin Paris, 1848. . 321
Kerguelenensis (Eatoniella), Smith. Ann. & Mag. xvi, p. 70, 1875, ... 391
Kergueleni (Rissoa), E. A. Smith. Ann. Mag. Nat. Hist. 1875, p. 69, t. 9, f. 12, ... 357
Kershawi (Rissoina) Tenison-Woods. Trans. Roy. Soc. Victoria, xiv, p. 57, ... 392
Kisloensis (Rissoa) Dunker. Mörch. Vid. Med. Kjoben. 128, 1871. = R. inconspicua, Alder. var. globosa, Mörch. . 327
Krebsi (Rissoa), Mörch. Malak. Blatt. p. 50, 1876.
= R. multicostata, C. B. Ad. 371

Labiata (Rissoa), Phil. Enum. Moll. Sicil. p. 155, t. 10, f. 7, = R. striatula, Mont. 367
Labiosa (Helix), Mont. Test. Brit. p. 400, t. 14, f. 7, 1803.
= Rissoa membranacea, Adams. 329
Labrosa (Rissoina), Schwartz. Familie Rissoiden, p. 94, f. 58, 1860, ... 382
Lactea (Rissoa), Brown. Ill. Conch. p. 11, t. 8, f. 87, 1844.
= R. Bryerea, Mont. 379
Lactea (Rissoa), Michaud. Desc. Gen. Rissoa, p. 7, t. 11, f. 12, 1833, ... 365
Lacunatus (Amphithalamus), Carpenter. Proc. Cal. Acad. Sci. 1865, p. 217, ... 340
Lævigata (Rissoa), Menke. Synopsis, p. 82, 1830, . . 369
Lævigata (Rissoina), C. B. Ad. Contrib. Conch. p. 114, 1850, 390
Lævis (Delphinula) Phil. Enum. Moll. Sicil. ii, 146, 1844.
= Skenea Serpuloides, Mtg. 398
Lævis (Cingula) DeKay. Nat. Hist. N. Y. Mollusca, p. iii, pl. 6, fig. 118, ... 346
Lævis (Rissoa), Monts. Journ. de Conch. xxv, p. 36, pl. iii, fig. 9, 1877. = R. similis, Scacchi. 327, 341
Lævis (Rissoa soluta, var.) Sars. Bidr. Kundsk. Christian. ii.
= R. turgida, Jeffreys. 353
Lævissima (Rissoina), C. B. Ad. Contrib. Conch. p. 115, 1850. = R. Browniana, d'Orbigny. 390
Lamberti (Rissoa), Souverbie. Journ. de Conch. p. 425, t. 14, f. 6, 1870. = R. spirata, Sowb. 388
Lanciæ, (Rissoa) Calcara. Cenno sui Moll. viv. & foss. della Sicil. p. 29, pl. iv, fig. 12, ... 361
Lanciæ (Rissoa), Monts. Nuov. Rivista, p. 27.
= R. pagodula, B. D. D. 366
Lantzi (Rissoa) C. Velain. Archiv. Zool. Exper. 1877, p. 114, t. 3, f. 14, ... 344
Lanzai (Rissoa) Dunker (in coll.) = R. decorata, Phil. . 326

PAGE.

Latilabre (carychium) Jan. Monts., Nat. Sicil. iii, 37.
= R. auriscalpium. 332
Latior (Cingula) Mighels & Adams. Bost. Journ. Nat. Hist. iii, p. 48, pl. 4, fig. 22, ... 357
Laurae (Rissoa) Folin. Fonds de la Mer. i, p. 263, pl. xxiv, fig. 3, ... 350
Layardi (Rissoa) Petterd. Journ. of Conch. 1884, p. 138, . 368
Leacocki (Rissoa), Watson. Zool. Proc. p. 365, t. 34, f. 1, 1873, ... 363
Leptalea (Cingula) Verrill. Trans. Conn. Acad. vi, p. 182, pl. 32, fig. 10. = R. saxatilis, Möller. 347
Lia (Rissoa), Benoit, Mss. Monterosato, Conch. Medit. p. 17, 329
Ligata (Alvania) Gould. Proc. Bost. Soc. Nat Hist. vii, p. 402, 1860, ... 350
Ligata (Rissoa), Gould. Sowb. Conch. Icon. sp. 105,
= R. trochlearis, Gould. 394
Lignea (Rissoa), Thorpe. Reeve, Conch. Icon. fig. 81,
? = R. lineata, Risso. 360
Lilacina (Rissoa), Recluz. Rev. Zool. Cuv. p. 6, 1843, . . 329
Limbata (Cingula) Hutton. New. Zealand Journ. of Science, p. 477, i, 1883, ... 355
Limpida (Setia) Monts. Nat. Sicil. iii, p. 279, . . .
Lineata (Rissoa) Petterd. Journ. of Conch. 1884, p. 137, . 368
Lineata (Rissoa), Risso. Eur. Merid. iv, p. 142, f. 120, 1826, 360
Lineta (Rissoa) Watson. P. Z. S. 1873, p. 387, pl. 36, fig. 26, 341
Lineolata (Rissoa decorata, Phil. var.) Brusina. Moll. Dalmat., 19, ... 326
Lineolata (Rissoa), Mich. Desc. Gen. Rissoa, p. 9, f. 13, 14, 1832, ... 329
Lirata (Rissoa striata, Ad. var.) Watson. P. Z. S. 1873, p. 368, pl. 34, fig. 4, ... 347
Lirata (Rissoina) Angas. P. Z. S. 1880, p. 417, pl. 40, fig. 11, 373
Littorinæformis (Rissoa?) Garrett. P. A. N. S. Phil. 1873, p. 215, pl. 2, fig. 20, ... 358
Loxostoma, Bivona, Gen. e spec. 1838.
= Rissoa, Freminville. . . . . .
Lucida (Nevillia) H. Adams. Zool. Proc. 289, 1868, . . 360
Lucida (Anoba) A. Ad. Ann. & Mag. Nat. Hist. xi, 1863, p. 359, ... 350, 396
Lucida (Putilla), A. Ad. Zool. Proc. 1. 312, 1867, . . 396
Lusciniæ (Rissoa Watson. Challenger Rept. xv, p. 597, pl. 44, fig. 3, ... 362
Lyrata (Rissoina), Gould. Bost. Proc. vii, p. 401, 1861, . 379

Macandrewi (Rissoia), Manzoni. Journ. de Conch. p. 164, t. 10, f. 1, 1868, ... 337
Maccoyi (Rissoa) Tenison-Woods. Proc. Roy. Soc. Tasm. 1876, p. 154, ... 351

PAGE.
Macilenta (Setia) Monts. En. & Sin. p. 27, ... 355
Macra (Ceratia) Watson. Challenger Rept. xv, p. 603, pl. 45, fig. 10, ... 351
Maculata (Rissoa), Brown. Ill. Conch. p. 12, t. 9, f. 5, 6, 1845. = R. inconspicua, Alder. 327, 334
Maculata (Rissoa), Monts. Test. Nuov. Sicil. p. 7, f. 1. = R. semistriata, Monts. (?) 352
Madreporica (Cingula), Issel. Malac. Mar Rosso. p. 200, 1869, t. 2, fig. 8, ... 353
Mainwaringiana (Rissoina), Nevill. Hand List, p. 83, 1885, 381
Major (Barleeia rubra, var), Monterosato. Journ. de Conch. p. 315, 1877. = B. majuscula Monts. . . . . .
Major (Rissoa elegantissima, Seguenza, var.) Monts. Nuova Rivista, p. 27. = R. subsoluta, Arad. 368
Majuscula (Barleeia) Monts. Il Nat. Sicil. iii, p. 230. = B. rubra, Ads. 392
Mammillata (Rissoa), Risso. Eur. Merid. iv, p. 145, f. 128. = R. cimex, Linn. 360
Mandralisci, (Rissoa) Aradas. Monts. Il Nat. Sicil. iii, 229. = R. punctulum, Philip. 340
Manzonia, Brusina. Ipsa Chieregh. Conchyl., 201, 1870, 316, 336
Marginata (Rissoa), Mich. Desc. Gen. Rissoa, p. 11, f. 15, 16, 1830, ... 334
Marginatus (Turbo), Laskey. Mem. Wer. Soc. i, p. 406. = Rissoa auriscalpium, Linn. 332
Mariæ (Rissoa), B. D. D. Moll. Roussillon, t. 36, f. 7–10. = R. Gergonia, Chier. 362
Mariæ (Rissoa (Cingula)), Tenison-Woods. Proc. Roy. Soc. Tasmania, 1875, p. 147, ... 354
Mariella (Alvania), A. Adams. Ann. & Mag. Nat. Hist. viii, 1861, p. 138, ... 365
Marionæ (Alvania) Mont. Enum. p. 26. 365
Marionæ (Odostomia), Macgilliv. Moll. Aderdeen. = R. striata, Mont. 347
Marionensis (Setia) Watson. Challenger Rept. xv, p. 607, pl. 44, fig. 12, ... 356
Marmorata (Rissoa), Cantraine. Bull. Acad. Belg. ix, p. 347. = R. semistriata, Mont. 352
Martyni (Cingula robusta, Dall, var.) Dall. Proc. U. S. Nat. Mus. 1886, p. 308, pl. iii, fig. 9, ... 345
Massotia, Bucq. Dautz. Dollf. Moll. Rouss. p. 298, 1884, 319, 365
Matoniana (Rissoa), Recluz. Rev. Zool. Cuv. p. 9, 1843. = R. interrupta, Ad. 332
Mauritiana (Rissoa), Martens. Mauritius, p. 285, t. 20, f. 17, 1880, ... 367
Mayeni (Rissoa), Friele. Nyt Mag. Naturv. p. 5, f. 4 a. b. 1878, ... 338

PAGE.
Media (Rissoina), Schwartz. Familie Rissoiden, p. 92, f. 56, 1860, ... 382
Melanostoma (Rissoa), Requien. Coq. Corse p. 53 no 28, . 326
Melanura (Rissoa) C. B. Ad. Contrib. Conch. 116, 1850. = Alaba. . . . . .
Melanura (Rissoa) Tenison-Woods. Proc. Roy. Sci. Tasm. 1876, p. 153, ... 358
Membranacea (Rissoa) Adams. Linn. Trans. v, t. 1, f. 14, 15, 329
Membranacea (Rissoa), var. Jeffreys. Brit. Conch. iv, p. 31. = R. elata, Phil. 331
Mercurialis (Onoba) Watson. Challenger Rept. xv, p. 600, pl. 45, fig. 12, ... 343
Mercurialis (Rissoina) Watson. Challenger Rept. xv, p. 619, pl. 46, fig. 8, ... 378
Messanensis (Risoa), Seguenza. Mss. Aradas & Benoit, Conch. Viv. Sicil. p. 314, 1870, ... 356
Micans (Rissoina), A. Ad. Zool. Proc. p. 265, 1851, . . 371
Micrometrica (Rissoa), Seguenza, Mss. Aradas. & Benoit, Conch. Sicil. p. 314, t. 5, f. 3, ... 364
Microsetia, Monts. Nomencl. Conch. Medit. 74, 1884 . 318, 353
Microstelma, A. Adams. Ann. Mag. N. Hist. xi, 347, 1863, 320, 379
Microstoma (Rissoa) Watson. Challenger Rept. xv, p. 591, pl. 44, fig. 10, ... 328
Microthyra (Barleeia), Martens. Mauritius, p. 205, t. 20, f. 18, 1880. = Amphithalamus. 339
Mighelsi (Rissoa) Stimpson. Bost. Proc. iv, 15. = R. arenaria, Migh. Ad. 347
Millecostata (Rissoina) Garrett. P. A. N. S. Phila. 1873, p. 210, pl. 2, fig. 3, ... 387
Milleri (Rissoa) Folin. Fonds de la Mer, i, p. 143, pl. xxii, fig. 5, ... 342
Minima (Jeffreysia), A. Ad. Ann. & Mag. vi, 332, 1860, . 397
Minor (Jeffreysia opalina, Jeffr. var.) Monts. Il Nat. Sicil. 1885, p. 21, ...
Minor (Rissoa crenulata, var.), Phil. Moll. Sicil. ii. p. 126. = R. subcrenulata, Schwartz. 363
Minor (Rissoina trochlearis, var.), Nevill. Hand List, p. 97, 1885, ... 394
Minuta (Rissoa) Totten. Am. Jour. Science, xxvi, 369, f. 7, 1834, ... 346
Minuta (Rissoina), Nevill. Journ. Asiat. Soc. Beng. xliii, Pt. 2, p. 25, t. 1, f. 15, 1874, ... 376
Minutissima (Rissoa), Mich. Desc. Gen. Rissoa, p. 17, f. 27, 28. = R. striata, Mont. 347
Minutissima (Rissoina) Tenison-Woods. Proc. Roy. Soc. Tasmania, p. 122, 1877, ... 392
Mirabilis (Rissoa), Manzoni. Journ. de Conch. xvi, p. 165, t. 10, f. 5, 1868, ... 336

PAGE.
Mirabilis (Rissoina), Dkr. Mus. Godeff. iv, p. 75, . 321, 391
Miranda (Rissoina), A. Ad. Ann. & Mag. viii, p. 135, 1861, 391
Mirifica (Onoba) A. Ad. Ann. & Mag. Nat. Hist. 1863, p. 348, ... 350
Modesta (Cingula) H. C. Lea. Proc. Bost. Soc. 1844, p. 205. = Assiminea. 346
Modesta (Rissoina) Gould. Proc. Bost. Soc. Nat. Hist. vii, 1860, p. 401, ... 387
Mohrensterni (Rissoa), Desh. Conch. Reunion, p. 62, t. 8, f. 6, 7, 1863, ... 386
Mohrensternia, Stolicz. Pal. Indica, ii, 274, 1868, . . 316
Monilifera (Rissoina), Nevill. Hand List, p. 79, 1885, . . 379
Monilis (Rissoina), A. Ad. , Zool. Proc., p. 264, 1851, . . 371
Moniziana (Rissoa), Watson. Zool. Proc., p. 373, t. 34, f. 10, 1873, ... 349
Monodonta (Rissoa), Bivona. Nuov. Riv. 330
Montacuti (Rissoa), Payradeau. Moll. Corsica, p. iii, t. 5, f. 13, 14. = R. Montagui, Payr. 360
Montagui (Rissoa), Payr. Cat. Moll. Corse, p. 111, t. 5, f. 13, 14, 1826, ... 360
Monstrosa (Rissoina Montrouzieri, var.), Nevill. Hand List, p. 90, 1885. = R. spirata, Sowb. 388
Montrouzieri (Rissoina), Souverbie. Journ. de Conch., p. 237, t. 9. f. 5, 1862. = R. spirata, Sowb. 388
Mörchiella, Nevill. Hand List Ind. Mus. ii, 88, 1884; Section F. of Rissoina, Hand List, 73, ... 320, 387
Mörchii (Cingula), Collin. Brachionopoder, Muslinger og Snegle fra Kara-Havet, 16, 1886, ... 348
Mucronata (Rissoa), Menke. Synopsis, p. 83, 1830, . . 369
Multicostata (Rissoa deliciosa, Jeff. var.), Jeffr. P. Z. S., 1884, p. 121, ... 328
Multicostata (Rissoina), C. B. Ad. Contrib. Conch., p. 114, 1850. = Rissoina elegantissima, d'Orb. . . . 371, 347
Multicostata (Rissoina), Garrett. Calif. Proc., p. 103, 1857. = R. ambigua, Gld. 371
Multicostata (Rissoina), Schwartz. Rissoiden, p. 86. = R. Krebsi, Mörch 371
Multilineata (Rissoa), Stimpson. Bost. Proc. iv, 15, 1851. = R. striata, Adams. 347
Munda (Sabanea), Monts. Il Nat. Sicil. iii, p. 139, . . 336
Mundula (Jeffreysia), A. Ad. Ann. & Mag. vi, 332, 1860, . 397
Mundula (Onoba), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 136, ... 350
Mutabilis (Alvania), Schwartz, Mss. Weink. Conch. Mitt. ii, p. 311. = Alvania scabra, Philip. 363
Myosoroides (Rissoina), Recluz. Fide Schwartz, Familie Rissoiden, p. 66, f. 30, 1860. = R. ambigua, Gld. var. . 371

PAGE.
Nana (Rissoa), Hutton. Cat. Mar. Moll. N. Zealand, p. 28, 1873, ... 393
Nana (Rissoa), Phil. Test. Verst., p. 52, 1843.
= R. dolium, Nyst. 332
Neglecta (Rissoa), Locard. Cat., p. 256.
= R. variabilis, Muhlf. 325
Nevillia, A. Adams. Zool. Proc., 289, 1868, . . . 319, 366
Nevilliana (Rissoina), Weink. Conch. Cab., p. 68, t. 15a, f. 7, t. 15d, f. 2, ... 372
Nicolosiana (Rissoa), Arad. Benoit. Conch. della Sicil.
= R. Montagui, Payr. 360
Nigra (Cingula), Krauss. Sud-Afrik. Moll., p. 86, t. 5, f. 19, 1848, ... 358
Nitens (Apicularia), Monts. Il Nat. Sicil., iii, p. 140; Nomencl., p. 47, ... 341
Nitens (Pyramis), Brown. Ill. Conch., t. 50, f. 77, 1827.
= Rissoina Bryerea, Mont. 379
Nitens (Rissoa), Dunker. Frauenf. Novara Exped., p. 13, t. 2, f. 22, 1866, ... 355
Nitida (Hyala), A. Ad. Ann. & Mag. vi, 123, 1870, . . 351
Nitida (Jeffreysia), Sars. Vidensk. Forh., 1858.
= Liostomia eburnea, Stimp. 397
Nitida (Rissoa), Brus.Mss. Monts. Nuova Rivista, p. 28, . 340
Nitida (Rissoina), A. Ad. Zool. Proc., p. 226, 1851.
= R. bellula, A. Ad. 383
Nitidissima (Skenea), Forbes & Hanley. Brit. Moll. iii, 158.
= Homalogyra atomus, Ph. 399
Nitidula (Rissoina), Gld. Bost. Proc. vii, 1861, p. 400, . . 385
Nivea (Rissoina), A. Ad. Zool. Proc.; p. 265, 1851, . . 379
Nodicincta (Rissoina), A. Ad. Zool. Proc., p. 266, 1851, 383, 376
Nodosa (Rissoa), Brusina in Sched. Moll. Dalm., 22.
= R. Frauenfeldiana, Brusina. 326
Nodulifera (Rissoa), Kust. Conch. Cab., 106.
= R. variabilis, Muhlf. 325
Nodulus, Monts. Enum. Sin., 26, 1878, . . . 317, 340
Novarensis (Alvania), Frauenf. Voy. Novara, p. t. 2, f. 16, 1867, ... 329
Novarensis (Rissoa), Watson. Zool. Proc., p. 377, t. 35, f. 13, 1873. = R. cuchila, Watson. 335

Obeliscus (Rissoina), Recluz. Schwartz, Rissoina, p. 53, . 376
Obesus (Amphithalmus), H. Ad. Zool. Proc., p. 754, 1865, . 340
Oblita (Rissoa), Tiberi, Mss. = R. turgida, Jeffr. . . . 353
Oblonga (Rissoa), Desm. Bull. Soc. Philom. Paris, p. 7, f. 3, 1814, ... 331
Oblonga (Rissoa), Midd. Malac. Ross., p. 26.
= R. venusta, Phil. 331

PAGE.
Obscura (Rissoa), Phil. Enum. Moll. Sic. ii, p. 127, t. 23, f. 10, 1844. = R. parva, DaCosta. 332
Obtusa (Rissoa abyssicola, var.), Jeffreys. Ann. & Mag., p. 13, 1870. = R. subsoluta, Aradas. 368
Obtusa (Rissoa), Cantraine. Bull. Acad. Bruxelles, 1842, pt. ii, p. 348. = R. soluta, Phil. 356
Obtusispira (Rissoa), Seg. Mss. = R. turgida, Jeffr. . . 353
Oceani (Rissoa), Aradas & Benoit. Conch. Viv. Sicil., p. 197. = R. subcrenulata, Schwartz. 363
Ochroleuca (Setia), Brusina. J. C., 1869, p. 247, . . . 355
Octona (Rissoa), Linn. Nilsson, Moll. Sued., p. 92. = R. membranacea, Adams. Var. 329
Oenonensis (Rissoa), Brusina. Moll. Dalm., p. 20, pl. 3, fig. 6. = R. albella, Lovén. 334
Olivacea (Alvania). Frauenfeld. Voy. "Novara," pl. ii, fig. 14, ... 339
Olivacea (Dardania), Hutton. Trans. N. Zealand Inst., 1881, xiv, p. 147, ... 397
Omalogyra, Jeffreys. Jour. de Conch., 1860. = Homalogyra, Jeffr. 324
Omphalotropis (Rissoella), A. Ad. Ann. & Mag., p. 332, 1860, 397
Onoba, H. & A. Adams. Gen. Rec. Moll., 1, 331, 1854, . 318, 346
Opalina (Jeffreysia), Jeffreys. Ann. Mag. N. Hist., 3d Ser., ii, 351, ... 396
Orientalis (Rissoa), Nevill. Journ. Asiat. Soc. Beng., p. 161, 1881. = R. triticea, Pse. 380
Ornata (Iravadia), Blanford. Journ. Asiat. Soc. Beng., p. 6, t. 13, f. 13, 14, 1867, ... 393
Ornata (Rissoa), Phil. Zeitsch. für Malak., p. 97, 1846. = R. splendida, Eichw. 325
Oryza (Rissoina), Garrett. Proc. Phila. Acad., p. 210, pl. 2, fig. 4, 1873, ... 390
Ovatella (Rissoa), Forbes. Rep. Brit. Assoc. xiii, p. 189, 1843. = R. similis, Scacc. 327

Pachia (Rissoa), Watson. Challenger Rept. xv, p. 602, pl. 45, fig. 7, ... 348
Pachylabris (Rissoina d'Orbigny, var.), Nevill. Hand List, p. 92, 1885. = R. spirata, Sowb. 388
Pagodula (Rissoa), Buquoy, D. D. Moll. Rouss., p. 296, t. 56, f. 23–26, ... 366
Pallida (Barleeia rubra, var.), Jeffreys. Brit. Conch. iii. . 392
Pallida (Homalogyra atomus, Ph. var.), Brus. Med. & Adr. . 399
Pallida (Microsetia fulgida, Ad. var.), Jeffreys. Monts. Nat. Sicil. iii, 280, ... 354
Paludinoides (Rissoa), Calc. Monog. Spirorbis & Succinia Pal., 1841, p. 10. = Setia fusca, Philip. 354
Papuana (Rissoa), Canefri. Ann. Mus. Civico, Genoa, ix, 288, 368

PAGE.
Paradoxa (Zippora), Monts. Il Nat. Sicil. iii, p. 137, . . 331
Parva (Rissoa), DaCosta. Brit. Conch., p. 104, 1779, . . 332
Parva (Rissoa, Var.), Forbes & Hanley. Brit. Moll. iii, t. 76, f. 6, t. 80, f. 1–4. = R. interrupta, Adams. . . . 332
Parva (Rissoa), Jeffreys. Brit. Conch. iv, p. 26. = R. radiata, Phil. 333
Parvisetia, Monts. Nomencl. Conch. Medit., 73, 1884, . 319, 358
Parvula (Rissoa), Jeffreys. Zool. Proc., p. 115, t. 9, f. 2, 1884, 337
Paryphostoma, Bayan, 1873. = Keilostoma, Desh. . . 321
Patens (Setia), A. Gould. Proc. Bost. Soc. Nat. Hist. viii, p. 280, ... 359
Patula (Onoba), A. Ad. Ann. & Mag. Nat. Hist. xi, 1863, p. 349, ... 350
Paucicostata (Ammonicerina), O. G. Costa. Microd. Medit., p. 7, t. 11, f. 1, 1861. = Homalogyra rota, Forbes & Hanley. 399
Paupercula (Cingula), C. B. Adams. Panama Catalogue. = Diala. 346
Paupercula (Rissoa cimex, Linn. var.), Monts. Bull. Soc. Mal. Ital., 1879, p. 223, ... 360
Peaseana (Rissoina), Nevill. Weink. Conch. Cab., t. 15a, f. 6. = R. percrassa, Nevill. 389
Pedicularis (Rissoa), Menke. Zeitsch. für Malak., p. 43, 1845, 369
Pelagica (Rissoa), Stimpson. Bost. Proc. iv, 15. = R. carinata, Mighels and Ads. 348
Pelecydium, Fischer. Fonds de la Mer, ii, 183, 1872, . 317, 341
Pellucida (Skenea), Monterosato, Mss. Jour. Conch., 1874, p. 263. = S. helecina, Jeffreys, Mss. 398
Pellyæ (Amphithalamus), Nevill. Journ. Asiat. Soc. Beng. l, Pt. 2, 165, 1881, ... 340
Peloritana (Rissoa), Aradas & Benoit. Conch. Viv., p. 205. = R. lineata, Risso. 360
Percrassa (Rissoa), Nevill. Journ. Asiat. Soc. Bengal, xliii, p. 26, t. 1, f. 13, 1874, ... 389
Peringiella, Monts. Enum. e Sin., 27, 54, 1878, . . 317, 341
Perlanceolata (Rissoina subdebilis, var.), Nevill. Hand List, 75, ... 376
Perlata (Rissoa), Morch. Mal. Blatt. vii, p. 68, 1860, . . 365
Perminima (Rissoa), Manzoni. Journ. de Conch., p. 244, t. 10, f. 8, 1868, ... 353
Pernambucensis (Rissoa), Watson. Challenger Rept. xv, p. 590, pl. 44, fig. 9, ... 335
Perpusilla (Rissoina ambigua, var.), Nevill. Hand List, p. 74, 1885, ... 371
Persephona, Leach. Moll. Great Brit., 189, 1852, . . 316, 330
Peteningensis (Cingula), Gould. Wilkes' Expl. Exped., 1852, p. 130, fig. 152, 152a, 152b. = Paludestrina. . . . 346
Petitii (Skenea), Fischer. Jour. de Conch., 173, 288, 1857, . 398

PAGE.
Pharaonica (Folinia), Folin. Fonds de la Mer, i, p. 259, . 338
Philippiana (Rissoa), Jeffr. Ann. & Mag. xvii, p. 183.
= R. pagodula, B. D. D. 366
Philippiana (Rissoina), Pfr. Reeve's Icon., f. 103.
= R. cancellata, Phil. 381
Philomelæ (Setia), Watson. Challenger Rept. xv, p. 609, pl. 45, fig. 2, ... 356
Phosinella, Mörch. Mal. Blatt. xxiii, 51, 1876, . . 320, 381
Picta (Nevillia), A. Adams. Zool. Proc., 289, 1868, . . 366
Picta (Rissoa), Jeffreys. Ann. & Mag., p. 435, 1867, . . 352
Pinnæ (Rissoa), Krauss. Sud.-Afrik. Moll., p. 87, t. 5, f. 21, 1848, ... 333
Pisinna, Monts. Enum. e Sin., 26, 1878, ... 317
Plagiostyla, Fischer. Fonds de la Mer, ii, 50, 1872, . 318, 352
Planorbis (Skenea), Fabricius. Faun. Groenl., 294, . . 398
Plicata (Rissoa), Hutton. Cat. Mar. Moll. N. Zealand, p. 28, . 392
Plicata (Rissoina), A. Ad. Zool. Proc., p. 264, 1851, . . 375
Plicatula (Rissoa), Gould. Bost. Proc. vii, p. 401, 1861, . 377
Plicatula (Rissoa), Risso. Hist. Eur. Merid., p. 143, f. 134, 1826, ... 325
Plicatus (Turbo), Muhlf. Verh. Berl. Gesell. i, p. 202, t. 9, f. 2. = Rissoa costata, Adams. 336
Poliana (Mangelia), Risso. Hist. Eur. Merid. iv, p. 221, f. 103, 1826. = Rissoina Bruguieri, Payr. 370
Polychroma (Rissoa), Folin. Fonds de la Mer, i, p. 133, pl. xx, fig. 5, ... 355
Polyzona (Homalogyra atomus, Ph., var.), Brus. Med. & Adr. 399
Porifera (Rissoa), Lovèn. Ind. Moll. Scand., p. 24, 1846.
= R. violacea, Desm. Var. 330
Præusta (Rissoa), Recluz. Rev. Zool. Cuv., p. 105, 1843, . 369
Princeps (Rissoa), C. B. Ad. Contrib. Conch., p. 116, 1850.
= R. reticulata, Sowb. 385
Principis (Setia), Watson. Challenger Rept. xv, p. 608, pl. 44, fig. 13, ... 356
Privati (Rissoina), Folin. Les fonds de la Mer, 1867, p. 16, t. 1, fig. 8, ... 382
Procera (Onoba), A. Ad. Ann. & Mag. Nat. Hist. viii, 136, 1861, xi, 1863, p. 348, ... 350
Procera (Rissoa), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 136, ... 368
Protensa (Rissoa), Locard. Cat. 256. = R. variabilis, Muhlf. 325
Proxima (Rissoa), Alder, Mss. Thompson, Ann. & Mag. xx, p. 174, ... 351
Psammitica (Cingula), Issel. Mal. Mar Rosso, 1869, p. 201, t. 2, fig. 9, ... 330
Pseudobryerea (Rissoina), Nevill. Journ. Asiat. Soc. Bengal, 1881, pt. ii, p. 164, ... 379

PAGE.
Pseudoconcinna (Rissoa), Nevill. Hand List, p. 98, 1885, . 391
Pseudoprinceps (Rissoina), Weink. Conch. Cab., p. 93.
= R. reticulata, Sowb. 385
Pseudosetia, Monts. Nat. Sicil. iii, 281. = Microsetia, Monts. 318
Pulchella (Dunkeria), A. Adams. Ann. Mag. N. Hist., 120,
1860, ... 396
Pulchella (Homalogyra), Costa. Microd. Med. Napoli, 1861,
p. 71, t. 12, f. 1. = H. rota, Forbes & Hanley. . . . 398
Pulchella (Rissoa), Danilo & Sandri. Elenco Nom., p. 58.
= R. decorata, Phil. 326
Pulchella (Rissoa), Petterd. Quar. Journ. Conch., 1884, p.
138, ... 368
Pulchella (Rissoa), Phil. Enum. Moll. Sic. i, p. 155, t. 10, f.
12, ... 333
Pulchella (Rissoa), Risso. Hist. Eur. Merid., p. 121, 1826.
= R. auriscalpium, Linn. 332
Pulchella (Rissoina), Brazier. Proc. Linn. Soc. N. S. Wales,
i, p. 367, ... 392
Pulcherrima (Rissoa), Jeffreys. Ann. & Mag. ii, p. 351, 1848, 352
Pulchra (Rissoa), C. B. Ad. Contrib. Conch., p. 114, 1850.
= Rissoa cancellata, Phil. Var. 381
Pulchra (Rissoa), Forbes. Rep. Brit. Assoc. xiii, p. 189, 1843.
= R. dolium, Nyst. 332
Pulchra (Rissoa), Johnson. = R. semistriata, Mont. . . 352
Pulicaria (Cingula), Fischer. Fonds de la Mer, ii, p. 207, pl.
ix, fig. 4, ... 355
Pulla (Rissoa), Brown. Ill. Conch., p. 13, t. 9, f. 25, 1844.
= R. membranacea, Adams. 329
Pumila (Hyala), A. Ad. Ann. Mag. N. Hist. vi, 123, 1870, . 351
Pumila (Rissoa), Monts. Nomencl. Conch. Medit., 74, 1884, . 355
Punctata (Rissoa), Potiez. Galerie, i, p. 274, t. 28, f. 3, 4,
1838. = R. violacea, Desm. 330
Punctato-striata (Rissoa), Tenison Woods. P. R. S. Tasm.,
1878, p. 35, ... 346
Punctifera (Rissoa), Watson, Mss. = R. depicta, Mazoni. . 350
Punctata (Rissoa), Kust. Conch. Cab., 106.
= R. variabilis, Mühlf. 325
Punctulum (Rissoa), Phil. Enum. Moll. Sicil. i, 154, t. 10, f.
11. = R. glabrata, Mühlf. 340
Punctum (Rissoa), Cantraine. Bull. Acad. Bruxelles., 1842,
pt. ii, p. 347, ... 369
Puncturata (Rissoa), Macgill. Moll. Aberd.
= R. punctura, Mont. 337
Punctura (Turbo), Montagu. Test. Brit. ii, p. 320, t. 12, f. 5, 337
Pupiformis (Rissoa), A. Adams. Ann. & Mag. Nat. Hist. v,
1860, p. 411, ... 368
Pupoidea (Fenella), Carpenter. Proc. Cal. Acad. Sci., 1865,
p. 217, ... 395

PAGE.
Pupoides (Fenella), A. Ad. Ann. & Mag. vi, 1860, p. 336, . 394
Pupoides (Amphithalmus), H. Ad. Zool. Proc., p. 754, 1865, 340
Pupoides (Rissoa), Requien. Coq. Corse., p. 56.
? = R. proxima, Alder. 351
Pura (Alvania), A. Gould. Proc. Bost. Soc. Nat. Hist. vii, p. 402, 1860, ... 365
Purpurea (Alvania), Dall. Amer. Journ. Conch. viii, p. 116, 1872, ... 365
Purpurea (Rissoa), Hutton. Cat. Mar. Moll. N. Zeal., p. 29, 1873, ... 344
Purpurea (Rissoa), McAndrew. Monts. Il Nat. Sicil. iii, 140.
= R. violacea, Desm. 330
Pusilla (Rissoa), Phil. Enum. Moll. Sic. i, p. 154, t. 10, f. 13, 1836. = R. dolium, Nyst. 332
Pusilla (Rissoina), Schwartz. Rissoiden, t. 4, f. 29.
= R. ambigua, Gld. 371
Pusillina, Monts. Nomenc. Conch. Medit., 56, 1884, . . 316
Putilla, A. Adams. Zool. Proc., 312, 1867, . . . 322, 396
Pygmæa (Risso), Mich. Desc. Gen. Rissoa, p. 18, f. 25, 26.
= R. fulgida, Adams. 354
Pyramidalis (Rissoina), A. Ad. Zool. Proc., p. 264, 1851, . 369
Pyramidella (Rissoa), Brown. Ill. Conch., p. 11, 1844.
= R. decussata, Mont. 385
Pyramidelloides, Nevill. Hand List, ii, p. 95, 1884, . 320, 391
Pyrgula (Ceratia), A. Ad. Ann. & Mag. Nat. Hist. vi, p. 1870, p. 121, ... 351
Pyrrhias (Rissoa), Watson. Challenger Rept. vi, p. 588, pl. 44, fig. 4, ... 328

Quadrata (Alvania), Gould. Proc. Bost. Soc. Nat. Hist. vii, p. 402, 1868, ... 365
Quisquiliarium (Setia), Watson. Challenger Rept. xv, p. 609, pl. 45, fig. 3, ... 357

Radiata (Rissoa), Phil. Enum. Moll. Sicil. i, p. 151, t. 16, f. 15, 1836, ... 333
Reticulata (Fenella), A. Ad. Ann. & Mag. vi, p. 422, 1860; Smith, Trans. Roy. Soc. Vol., 168, 478, ... 395
Reticulata (Mangelia), Risso. Hist. Europe Merid. iv, p. 211, f. 102, 1826. = Rissoina Bruguerei, Payr., ... 370
Reticulata (Rissoa), Carp. (non Mont.) Ann. & Mag. xiv, p. 429, 1864.=R. Carpenteri, Weink. 365
Reticulata (Rissoa), Mont. Test. Brit., p. 322, t. 21, f. 1, . 361
Reticulata (Rissoa), Sowb. Conch. Manual, f. 346; Genera of Shells, t. 208, f. 1, 1820–1824, ... 385
Rimata (Barleeia subtenuis, var.), Carp. Jour. Conch., 1865, p. 144, ... 393

PAGE.
Rissoanus (Turbo), Delle Chiaje, iii, p. 223, 1829.
= Rissoa variabilis, Muhlf. 325
Rissoella, Gray. Zool. Proc., 159, 1847. = Jeffreysia, Alder. 323
Rissoia, Frémenville. Desm. Bull. Soc. Philom., 7, 1814, 314, 315, 325.
Rissoi (Rissoina), Andouin. Expl. Savigny, Descr. Egypte, t. 4, f. 1, ... 378
Rissoiformis (Fenella), Issel. Mal. Mar Rosso, 1869, . . 395
Rissoina, d'Orb. Voy. Amér. Merid., 1840, . . . 319, 369
Rissolina, Gould. Bost. Proc., 1861; Otia Conch., 145, . 320, 374
Rissopsis, Garrett. Proc. Philad. Acad., 228, 1873, . 319, 359
Rissostomia, Sars. Moll. Reg. Arct. Norv., 179, 1878, . 315, 329
Robusta (Cingula), Dall. MS. Krause, Archiv für Naturg. li, t. 17, f. 1, ... 345
Robusta (Cingula), H. C. Lea. Proc. Bost. Soc., 1844, p. 204.
? = R. latior, Mighels & Adams. 357
Rosea (Rissoa cyclostoma, var.), Tenison Woods. P. R. S. Tasmania, 1876, p. 153, ... 344
Rosea (Rissoa), Desh. Conch. Reunion, p. 61, t. 7, f. 29, 1863, 380
Rosea (Rissoa), Hutton. Cat. Mar. Moll. N. Zealand, p. 29, 1873, ... 393
Rota (Homalogyra), Forbes & Hanley. Brit. Conch. iii, 160, 399
Rubra (Barleeia), Adams. Trans. Linn. Soc. iii, t. 13, f. 15, . 392
Rubrocincta (Rissoa), Danilo & Sandri. Elenco Nom., p. 54.
= R. similis, Scacchi. 327
Rudis (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 128, t. 23, f. 12, 367
Rufa (Rissoa), Ph. Zeitsch. für Malak., p. 167, 1848, . . 368
Rufilabrum (Rissoa), Alder. Ann. Mag. xiii, 325, 1815.
= R. violacea, Desm. Var. 330
Rufocincta (Dunkeria), A. Ad. Ann. & Mag. viii, 300, 1861, 396
Rufula (Rissoa Algeriana, var.), Monts. Journ. de Conch., p. 35, 1877, ... 333
Rugulosa (Rissoa), Arad. Foss. Sicilians.
= Alvania lineata, Risso. 360
Rugulosa (Rissoa), Hutton. Cat. Mar. Moll. N. Zealand, p. 28, 1873, ... 392
Rupestris (Rissoa), Forbes. Ann. & Mag. v, p. 107, t. 2, f. 3.
= R. cingillus, Mont. var. 342
Russinoniaca (Alvania), Locard. Cat., p. 248.
R. striatula, Mont. 367
Rustica (Cingula), Watson. Challenger Rept. xv, p. 604, pl. 44, fig. 11, ... 343
Sabanæa (Leach), Gray. Zool. Proc., 152, 1847, . . 316, 339
Sabulum (Rissoa), Cantraine. Bull. Acad. Bruxelles, 1842, pt. ii, p. 348; Watson, Zool. Proc., 387, 1873.
= R. glabrata, Mühlf. 340
Sagraiana (Rissoina), d'Orb. Moll. Cuba, ii, p. 25, t. 12, f. 4, 5, 1852, ... 384

PAGE.
Salebrosa (Rissoa), Frauenf. Novara Exped., p. 11, t. 2, f. 15, 327
Samoensis (Rissoina), Dkr. Mus. Godeffroy, iv, p. 75, . . 384
Sancti-Pauli (Jeffreysia), C. Velain. Arch. Zool. Exper., 1877, p. 116, pl. 3, fig. 20, ... 397
Sandersoni (Cingula), Verrill. Trans. Conn. Acad. iv, p. 241, 346
Sardoa (Alvania), Risso. Europ. Merid. iv, p. 145.
= Rissoa Montaguii, Payr. 360
Sarsi (Rissoa), Lovén. Ind. Moll. Scand., p. 24, 1846.
= R. albella, Lovén. 334
Saxatilis (Rissoa), Moller. Moll. Groen., p. 1842; Dall. Proc. Nat. Mus. vi, 306, ... 347
Scabra (Rissoina), Garrett. Proc. Acad. Nat. Sci. Phila., 1873, p. 210, pl. 2, fig. 6, ... 384
Scabra (Alvania), Monts. Il Nat. Sicil. iii, 160.
= A. Lanciæ, Calc. 361
Scabra (Fenella), A. Ad. Ann. & Mag. vi, p. 421, 1860.
= F. cerithina, Phil. 395
Scabra (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 126, t. 23, f. 8, 1836, ... 363
Scabriuscata (? Rissoa), Req. Coq. Corse, p. 52, 1848.
= R. Philippiana, Jeffr. 366
Scalarella (Rissoina), C. B. Ad. Bost. Proc. ii, p. 6, 1845.
= R. Chesneli, Mich. 380
Scalariformis (Rissoina), Schwartz. Rissoina, f. 24.
= R. plicata, A. Ad. 375
Scalariformis (Rissoa), Schwartz & authors (in part). Rissoiden, p. 127, (not C. B. Ad.)= R. triticea, Pse. . . 380
Scalariformis (Rissoa), Thorpe. Brit. Mar. Moll., p. 42, f. 89.
= R. Zetlandica, Mont. 338
Scalariformis (Rissoina), C. B. Ad. Panama Cat., p. 538, 1852.
= R. firmata, Ad. Carp. 2d Report, 189, ... 374
Scalariformis (Rissoina), Watson. Challenger Rept. xv, p. 617, pl. 46, fig. 6, ... 378
Scalarina (Rissoina), A. Ad. Zool. Proc., p. 265, 1851.
= R. plicata, A. Ad. 375
Scalaris (Rissoa), Mich. Desc. Gen. Rissoa, p. 18, f. 31, 32, . 369
Scalarioides (Rissoina), C. B. Ad. Contrib. Conch., p. 113, 1850. = R. Bryerea, Mont. 379
Schloneriana (Cingula), Brus. Moll. Mal. Ital., 1870, p. 9.
= Leachia elongata, Philip. 346
Schmeltziana (Rissoina), Dkr. Nevill, Hand List, 88.
= R. Mohrensterni, Desh. 386
Schwartzia, Bucq. Dautz. Dollf. Moll. Rouss., 278, 1884, 316, 330
Schwartziana (Rissoa), Brus. Contr., p. 25, t. 3, f. 9.
= R. Montagui, Payr. 360
Schwartziana (Rissoina), Dkr. Cat. Mus. Godeff. iv.
= R. obeliscus, Recluz. 376
Schwartziella, Nevill. Hand List Ind. Mus., 73, 1885, . 320, 379

PAGE.

Schwartzii (Rissoa), Benoit. Monts. Il Nat. Sicil. iii, 160.
= A. Lanciæ, Calc. 361
Schythei (Rissoa), Phil. Mal. Blatt. xv, p. 225, 1867, . . 369
Scillæ (Rissoa), Seguenza. Mss. Arad. & Benoit. Conch. Viv. Sicil., p. 315, t. 5, f. 4, ... 358
Scipio (Cingula robusta, Dall., var.), Dall. Proc. U. S. Nat. Mus., p. 305, pl. iv, fig. 10, ... 345
Scitula (Alvania), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 300, ... 365
Sciutiana (Rissoa), Arad. & Benoit. Conch. Viv. Sicil., p. 211, t. 5, f. 1. (= R. zancleana in Plate, in error.). . . . 354
Scolopax (Rissoina), Souverbie. Journ. de Conch. xxv, p. 75, t. 1, f. 3, ... 377
Scopulorum (Cingula), Watson. Challenger Rept. xv, p. 605, pl. 45, fig. 4, ... 343
Scrobiculata (Rissoa), Möller. Ind. Moll. Grœnl., p. 9, 1842, . 369
Scrobiculator (Rissoa [Scrobs]), Watson. Challenger Rept. xv, p. 611, pl. 46, fig. 4, ... 339
Scrobs, Watson. Challenger Report, 611, 613, 1886.
= Amphithalamus, Carp. 317
Sculpta (Rissoa), Forbes & Hanley. Brit. Moll. iii, p. 88, t. 80, f. 5, 6. = R. cimicoides, Forbes. 362
Sculptilis (Rissoa), Monts. Journ. de Conch. xxv, p. 35, pl. iii, fig. 6, 1877, ... 353
Sculptilis (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 209, pl. 2, fig. 2. = R. granulosa, Pease. 383
Seguenziana (Rissoa), Issel. Malac. Mar Rosso, p. 209; Jahrb. Mal. Gesell. xi, 256. = R. Erythræa, Phil. . . . 383
Semi-carinatus (Rissoa), Folin. Fonds de la Mer, i, p. 249, pl. xxi, fig. 8, ... 345
Semi-costata (Alvania), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 137, ... 365
Semicostata (Cingula), Mighels and Ads. Bost. Journ. N. Hist. iv, 49. = R. carinata, M. and A. 348
Semicostata (Rissoa), Turton. Dict., p. 201.
= R. striata, Mont. 347
Semicostata (Rissoina), Pease. Amer. Journ. Conch. iii, p. 296, t. 24, f. 32, 1867, ... 395
Semicostulata (Rissoa), Anton. Verzeich., p. 62, 1839.
= R. parva, DaCosta. 332
Semiglabrata (Rissoina), A. Ad. Zool. Proc., p. 279, 1851.
= R. tridentata, Mich. 389
Seminulum (Rissoa), Monts. Journ. de Conch. xxv, p. 35, t. 3, f. 8, 1877, ... 341
Semiplicata (Rissoa), Pse. Zool. Proc., p. 242, 1862; Am. Journ. Conch. iii, t. 24, f. 29. = R. tridentata, Mich., juv. 389
Semistriatus (Turbo), Montagu. Test. Brit. Supp., p. 136, . 352

PAGE.
Serpuloides (Skenea), Gould. Invert. Mass. 1st Edit., 247.
= S. planorbis, Fabr. 398
Serpuloides (Skenea), Montagu. Test. Brit., 147. . 398
Setia, H. & A. Adams. Ann. Mag. N. Hist. x, 358, 1852, 318, 352
Sibirica (Rissoa), Leche. Kgl. Vet. Akad. Handl. xvi, p. 38, t. 1, f. 10, 1878, ... 336,
Siennæ (Rissoa), Tenison Woods. Proc. Roy. Soc. Tasm., 1876, p. 153. = Paludina granum, Menke. . . . 359
Sigmifer (Rissoina), Mörch. Mal. Blatt. xxiii, p. 48, 1876, . 387
Similis (Rissoa), Scacc. Cat., p. 14, 2, Not. 28, . . . 327
Simplex (Homalogyra). O. G. Costa. Microd. Medit., p. 72, t. 11, f. 3, 1861. = H. atomus, Ph. 399
Simplex (Rissoa), Phil. Enum. Moll. Sicil., p. 129, t. 23, f. 17, 1844. = R. radiata, Phil. 333
Simulans (Rissoa), Monts. Kobelt, Faun. Europ., 205, . . 338
Sinapi (Setia), Watson. Challenger Rept. xv, p. 610, pl. 45, fig. 13, ... 357
Sismondiana (Rissoa), Issel. Mar Rosso, 205, . . . 332
Skenea, Fleming. Hist. Brit. Anim., 297, 313, 1828, . 323, 398
Skenella, Pfir. Natur Hist. Mus. Hamburg, 1886, p. 96, 322, 396
Sloaniana (Rissoina), d'Orb. Moll. Cuba, ii, p. 28, t. 12, f. 36, 38, 1853, ... 390
Smithii (Eatoniella). Dall. Bull. U. S. Nat. Mus., 42, 1876, . 392
Smithi (Rissoina), Angas. P. Z. S., 1867, p. 114, pl. 13, fig. 21; 1877, 187. = R. fasciata, A. Ad. 370
Solida (Cingula?), C. B. Adams. Contr. Conch., 1850, p. 70, 346
Solidula (Rissoa), Phil. Zeitsch. für Malak., p. 167, 1848, . 368
Solidula (Setia Alleryana, Arad. & Ben. var.), Monts. Il Nat. Sicil. vii, p. 99, ... 354
Soluta (Rissoa), Phil. Moll. Sicil. ii, p. 130, t. 23, f. 18, 1836, 356
Sororcula (Rissoa), Granata. Descr. Coq. Nouv. Nap., 1870, p. 1. = R. Jeffreysi, Waller. 361
Souleyetana (Rissoa), Recluz. Rev. Zool. Cuv., p. 5, 1843. = R. membranacea, Adams. 329
Speciosa (Rissoa), Brusina. Moll. Dalmat., 22.
= R. Guerini, Recluz. 326
Spiralis (Rissoella), A. Ad. Ann. & Mag. vi, 332, 1860. . 397
Spiralis (Rissoina), Souverbie. Journ. de Conch. xiv, p. 358, t. 9, f. 9, ... 373, 388
Spirata (Onoba), A. Ad. Ann. & Mag. Nat. Hist. xi, 1863, p. 348, ... 350
Spirata (Rissoa), Sowb. Genera of Shells, No. 40, t. 208, f. 2, 1820–24, ... 379
Splendida (Rissoa), Eichw. Nat. Hist. Skizze, i, p. 219, 1830, 325
Splendida (Rissoa), Sowb. Conch. Icon., f. 79.
= R. variabilis, Muhlf. 325
Spreta (Rissoa Macandrewi, Manz. var.), Watson. P. Z. S., 1873, p. 373, pl. 34, fig. 9, ... 337

PAGE.
St. Claræ (Rissoina), Tenison Woods. Proc. Roy. Soc. Tasm., 184, 1876. = Alaba. . . . . .
Stefanisii (Rissoa), Jeffreys. Brit. Conch. v, 208. = R. subarcolata, Monts. 363
Stigmatica (Rissoa), Frauenf. Novara. Exp., p. 12, t. 2, f. 17, 364
Stimpsoni (Rissoa), S. Smith. Ann. N. Y. Lyc. vii, p. 157, 1862; ix, 395, ... 345
Stoppanii (Rissoa), Weinkauff (not Issel). Conch. Cab. = R. oryza, Garrett. 390
Stossichia, Brusina. Ipsa Chiereg. Conchyl., 201, 1870, 320, 391
Strangulata (Rissoa), Brusina. Contr., p. 23, t. 3, fig. 8. ? = R. variabilis, Moust. 325
Striata (Rissoa), Mont. Test. Brit. ii, p. 326, t. 13, f. 25, 26, . 346
Striata (Rissoa), Quoy. Voy. Astr. ii, p. 493, t. 33, f. 38, 39, 1832, ... 385
Striata (Rissoa similis, Scacc. var.), Monts. Il Nat. Sicil. iii, p. 139, ... 327
Striatissima (Rissoa), Rayn. = R. punctura, Mont. . . 337
Striato-costata (Rissoina), d'Orb. Moll. Cuba. ii, p. 27, t. 12, f. 30–32, 1853. = R. decussata, Mont. 385
Striatula (Rissoa), Jeffreys. Ann. & Mag., p. 16, 1848. = R. proxima, Alder. 351
Striatula (Rissoa), Montagu. Test. Brit. ii, p. 306, t. 10, f. 5, . 367
Striatula (Rissoina), Pease. Amer. Journ. Conch. iii, p. 296, t. 24, f. 31, 1867, ... 387
Stricta (Rissoina), Menke. Zeitsch. für Malak., p. 177, 1850, . 371
Strigillata (Rissoa), Gould. Bost. Proc. viii, p. 401, 1861. ? = R. Erythræa; Phil. 383
Striolata (Rissoa), Dkr. (not Risso), Schmeltz, Cat. Mus. Godeff. iv, p. 75. = R. ambigua, Gld. 371
Striolata (Rissoina), A. Ad. Zool. Proc., p. 266, 1851. = R. spirata, Sowb. 388
Striolata (Rissoina), Risso. Hist. Eur. Merid. iv, p. 119, 1826, 370
Striosa (Rissoa), C. B. Ad. Contrib. Conch., p. 116, 1850. = R. decussata, Mont. 385
Subangulata (Rissoa), Schwartz (not C. B. Ad.). Rissoina, p. 56. = R. plicata, A. Ad. 375, 379
Subangulata (Rissoina), C. B. Ad. Contrib. Conch., p. 112, 1850, ... 375
Subarcolata (Alvania), Monts. Test. Nuovi Sic., 1869, p. 9, fig. 3, ... 363
Subcanaliculata (Skenea), E. A. Smith. Ann. & Mag. Nat. Hist., 1875, p. 71, ... 398
Subcarinata (Rissoa), Cantr. Bull. Brux. ix, p. 347, 1842. = R. monodonta, Bivona. 331
Subcochlearella (Rissoina), d'Orb. Prodr. iii, p. 29, 1852. = R. decussata, Montagu. 385

PAGE.
Subconcinna (Rissoa), Souverbie. Journ. de Conch. xx, p. 364, 1872. = R. ambigua, Gld. 371
Subcostulata (Rissoa), Schwartz. Rissoidæ, p. 44. = R. costulata, Alder. 326
Subcrenulata (Rissoa), Schwartz, Mss. in Appelius, Conch. Mar Tirreno. 362
Subdebilis (Rissoina), Nevill. Küster, Conch. Cab., t. 15b, f. 9; Nevill, Hand List, p. 75, ... 376
Subfuniculata (Rissoina), Nevill. Weink. Conch. Cab., t. 15b, f. 8, 1881, ... 377
Subfusca (Rissoa), Hutton. Cat. Mar. Moll. N. Zealand, p. 28, 1873. = Rissoa purpurea, Hutton. 344
Sublævigata (Rissoa), Nevill. Journ. Asiat. Soc. Beng. l, Pt. 2, p. 164. = R. oryza, Garrett. 390
Subluteus (Turbo), Adams. Linn. Trans. iii, p. 65, t. 13, f. 15. = Rissoa parva, Maton. & Rack. 332
Submarginata (Rissoina d'Orbignyi, var.), Nevill. Hand List, p. 92, 1885. = R. spirata, Sowb. 388
Subpupoidea (Fenella), Tryon. 394
Subrufescens (Eatoniella), E. A. Smith. Ann. & Mag. xvi, p. S 71, 1875, ... 391
Subsoluta (Rissoa), Aradas. Mem. Malac. Sicil. iii, p. 21, . 368
Subspirata (Rissoina d'Orbignyi, var.), Nevill. Hand List, p. 92, 1885. = R. spirata, Sowb. 388
Substriata (Rissoa), Phil. Moll. Sic. ii, p. 132, t. 23, f. 20, . 369
Substriolata (Rissoina Montrouzieri, var.), Nevill. Hand List, p. 91, 1885. = R. spirata, Sowb. 388
Subsulcata (Rissoa), Phil. Moll. Sicil. ii, p. 129, t. 23, f. 16. = R. semistriata, Mont. 352
Subtenuis (Barleeia), Carp. Journ. de Conch. xii, p. 143, 1865, ... 393
Subtruncata (Rissoa), C. Velain. Arch. Zool. Exper., 1877, p. 115, pl. 3, figs. 16–17, ... 344
Subulina (Onoba), A. Ad. Ann. & Mag. Nat. Hist. viii, 1861, p. 299, ... 350
Subulina (Rissoina), Weink. Conch. Cab., p. 66, t. 15a, f. 3. = R. oryza, Garrett. 390
Subventricosa (Rissoa), Cantr. Bull. Acad. Brux., p. 348, 1842. = R. ventricosa, Desm. 325
Subvillica (Rissoina), Nevill. Weink. Conch. Cab., p. 88, t. 15d, f. 14, ... 374, 385
Sulcifera (Rissoa), Gld. Sowb. Conch. Icon., f. 105. = R. trochlearis, Gould. 394
Sulcifera (Iravadia), Troschel. Archiv. für Naturg., 1852, . 394
Supracostata (Rissoa), Sowb. Conch. Icon., f. 38. = R. albella, Loven. 334
Supracostata (Rissoina), Garrett. Proc. Acad. Nat. Sci. Phila., 1873, p. 209, pl. 2, fig. 1. = R. spirata, Sowb. . . . 388

PAGE.
Suprasculpta (Rissoina), Tenison Woods. Trans. Roy. Soc. Victoria, xiv, p. 57, ... 392
Syngenes (Cingula), Verrill. Trans. Conn. Acad. vi, p. 180, pl. 32, fig. 11, ... 328

Targionii (Rissoa), Appelius. Jeffreys, Zool. Proc., 116, 1884, 334
Tarsodes (Rissoa), Watson. Challenger Rept. xv, p. 595, pl. 44, fig. 2, ... 362
Tatea, Tenison Woods. Proc. Roy. Soc. Tasmania, 72, 1879, 323, 397
Tenera (Choristes elegans, var.), Verrill. Trans. Conn. Acad. v, 541, ... 399
Tenuicostata (Rissoa), Seg. Rendic. Acad. Neap., 1876, p. 1, . 369
Tenuisculpta (Rissoa), Watson. Zool. Proc., p. 389, t. 36, f. 28, 1873, ... 343
Tenuistriata (Rissoina), Pse. Amer. Journ. Conch. iii, p. 295, t. 24, f. 30, 1867, ... 386
Tenera (Rissoa), Phil. Enum. Moll. Sicil. ii, p. 128, t. 23, f. 15, 350
Terebra (Rissoina), Garrett. P. A. N. S. Phila., 1873, p. 212, pl. 2, fig. 11. = R. incerta, Souverb. 372
Terebroides (Rissoina), E. A. Smith. Journ. Linn. Soc., vol. xii, p. 554, pl. 30, fig. 19, ... 373
Teres (Rissoina), Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 367, ... 392
Tervaricosa (Rissoa), C. B. Ad. Proc. Bost. Soc. Nat. Hist., 6, 1845. = Alaba. . . . . .
Tessellata (Alvania), Schwartz, Mss. Weink. Conch. Mitt., p. 311. = A. Philippiana, Jeffr. var. 366
Testæ (Rissoa), Aradas & Maggiore. Catalogo Catan., p. 207, 1844, ... 368
Textilis (Rissoa), Philippi. Jeffreys, Zool. Proc., 112, 1884. = R. reticulata, Mont. 361
Textilis (Rissoa), Lovén. Moll. Scand. = R. punctura, Mont. 337
Thapsia, Monts. Nomencl. Conch. Medit., 65, 1884.
= Thapsiella, Fischer. 319
Thapsiella, Fischer. Manuel de Conch., 721, 1884, . 319, 367
Tiarula (Alvania), A. Adams. Ann. & Mag. Nat. Hist. viii, 1861, p. 137, ... 365
Tiberiana (Cingula), Issel. Mal. Mar Rosso, p. 199, 1869; Descr. Egypt, t. 3, f. 16, ... 359
Torcularis (Cingulina), Tenison Woods. Proc. Linn. Soc. N. South Wales, p. 263, 1878, ... 359
Tornatilis (Rissoina), Gld. Bost. Proc. vii, p. 401, 1861, . 379
Trajectus (Rissoa), Watson. Challenger Rept. xv, p. 596, pl. 44, fig. 6, ... 328
Transenna (Ceratia), Watson. Challenger Rept. xv, p. 603, pl. 45, fig. 9, ... 348
Transenna (Rissoina), Watson. Challenger Rept. xv, p. 620, pl. 46, fig. 10, ... 382

PAGE.
Translucens (? Jeffreysia), Carpenter. Proc. Cal. Acad. Sci., 1865, p. 219, ... 397
Triangularis (Rissoina), Watson. Challenger Rept. xv, p. 618, pl. 46, fig. 7, ... 348
Triangularis (Setia), Watson. Challenger Rept. xv, p. 611, pl. 46, fig. 2, ... 357, 373
Tricincta (Setia), A. Adams. Ann. & Mag. Nat. Hist. viii, 1861, p. 136, ... 359
Tridentata (Rissoa), Mich. Desc. Gen. Rissoa, p. 6, f. 5, 6, 1830, 389
Trifasciata (Rissoa), Adams. Monteros. Nomencl., 67. = R. cingillus, Montg. 342
Trilix (Skenea), Bush. Trans. Conn. Acad. vi, 464. = Homalogyra densicostata, Jeffreys. 399
Tristriata (Rissoa), Thompson. Ann. & Mag. ii, t. 2, f. 10. = R. semistriata, Mont. 352
Triticea (Rissoa), Pse. Zool. Proc., p. 438, 1860, . . . 380
Trochlearis (Rissoa), Gould. Bost. Proc. vii, p. 400, 1861, . 394
Trochlea (Rissoa), Michaud. Family Rissoid., t. 16, f. 3, 4. = R. striatula, Mont. 367
Trochiformis (Skenea), Locard. Cat. Moll. France, 299, . 398
Truncata (Rissoa), Garrett. P. A. N. S. Phila., 1873, p. 217, pl. 2, fig. 26, ... 351
Truncata (Rissoa), Menke. Synopsis, p. 83, 1830, . . . 369
Tuberculata (Rissoa), Menke. Synopsis, p. 83, 1830, . . 369
Tuberculifera (Corena), A. Ad. Ann. & Mag. vi, p. 122, 1870, ... 317, 339
Tumens (Jeffreysia), Carp. Mazat. Cat. 363, 1857. = Cythnia 397
Tumidula (Rissoa), Sars. Moll. Reg. Arct. Norv., p. 174, t. 10, f. 2a, b, ... 353
Turbella, Leach, 1847, ... 316, 332
Turbona (Leach), Gray. Ann. Mag. xx, 1847. = Alvania, Risso. 319
Turgida (Rissoa), Jeffreys. Ann. & Mag. Nat. Hist. v, 1870, . 353
Turgidula (Jeffreysia), A. Ad. Ann. & Mag. vi, 332, 1860, . 397
Turricula (Rissoa), Jeffreys. Zool. Proc., p. 120, t. 9, f. 6, 1884, 335
Turriculata (Rissoa), Monts. Nomencl. Conch. Medit., 73, 1884. = R. fusca, Phil. Var. 354
Turricula (Rissoina), Pease. Zool. Proc., p. 438, 1860, . . 377
Turricula (Rissoa), Angas. Proc. Zool. Soc., p. 114, 1867, pl. 13, fig. 20. = R. flexuosa, Gld. 380
Turriculus (Cingula), H. C. Lea. Proc. Bost. Soc., 1814, p. 205, ... 350
Turrita (Rissoina), Garr. Proc. Philada. Acad., p. 213, t. 2, f. 12, 1873. = R. insignis, Ad. & Rve. 389
Typica (Rissopsis), Garrett. Proc. Philad. Acad., 228, 1873, 319, 359

Umbilicata (Rissoa), Phil. Zeitsch. für Malak., p. 93, 1851, 368
Undata (Loxostoma), Bivona. = R. radiata, Phil. . . 333

PAGE.

Unifasciata (Turbo), Montagu. Test. Brit. 320, 1803.
= Rissoa rubra, Adams. 392
Unilirata (Rissoina), Tenison Woods. Proc. Roy. Soc. Tasmania, 1877, p. 123, ... 392

Variabilis (Turbo), Muhl. Berlin Verhandl. iv, p. 212, 1824, 325
Variegata (Ceratia), Canefri. Ann. Mus. Civico, Genoa, ix, p. 288, ... 351
Variegata (Rissoa), Schwartz. Rissoiden.
= R. inconspicua, Alder. Var. 334
Variegata (Rissoa), Angas. Zool. Proc., p. 113, 1867, pl. 13, fig. 19, ... 370
Variegata (Rissoa), Danilo & Sandri, teste Monterosato.
= R. aspera, Phil. 360
Variegata (Rissoa), Schwartz. Rissoiden, t. 2, f. 15.
= R. inconspicua, Alder. 327, 334
Ventricosa (Rissoa), Desm. Bull. Soc. Phil., 7, 1814, . . 325
Venusta (Rissoa), Garrett. Proc. Acad. N. S., Phila., 1873, p. 216, ... 367
Venusta (Rissoa), Phil. Enum. Moll. Sicil., p. 124, t. 23, f. 4, 1844, ... 331
Venustula (Pelycidium), Folin. Fonds de la Mer, t. 8, f. 5, . 341
Verrilli (Rissoa), Friele. Moll. Nordske Nordhavn Exp., p. 27, t. xi, fig. 5a, ... 346
Verrucosa (Alvania), Risso. Eur. Mérid., 143.
= R. crenulata, Mich. 365
Vesicalis (Rissoella), A. Ad. Ann. & Mag. vi, 332, 1860, . 397
Vexillata (Rissoa), Brusina. Moll. Dalmat. 28, . . . 356
Villæ (Cingula), Issel. Mal. Mar Rosso, p. 198, 1869, . . 344
Villica (Rissoa), Gould. Bost. Proc. vii, p. 401, 1861, . 374, 385
Villica (Rissoina), Sowb. (not Gld.), Conch. Icon., sp. 98.
= R. subvillica, Weink. 385
Vinacea (Rissoa), Recluz. Nevill, Hand List, 117, . . 395
Violacea (Rissoa), Desm. Bull. Soc. Philom. Paris, p. 8, t. 1, f. 7, 1814, ... 330
Violaceus (Turbo), Mühlf. Berl. Verhandl. i, p. 213, 1824.
= Rissoa lilacina, Recluz. 329
Violæstoma (Rissoa), Krynicki. Bull. Soc. Mosc. ii, p. 60, 1830. = R. splendida, Eichw. 325
Virgata (Fenella), Phil. Zeitsch. für Malak., 134, 1849, . 394
Virginea (Rissoa), Brown. = R. vitrea, Mont. . . . 351
Vitrea (Homalogyra atomus, var.), Duprey. Ann. & Mag., p. 188, 1883, ... 399
Vitrea (Rissoa), C. B. Ad. Contrib. Conch., p. 115, 1850.
= R. lævigata, Ad. 390
Vitrea (Rissoa?), Garrett. P. A. N. S. Phila., 1873, p. 215, pl. 2, fig. 19, ... 342

PAGE.

Vitrea (Rissoa), Jeffreys. Brit. Conch. iii, p. 41.
= Jeffreysia nitida, Sars. 397
Vitrea (Rissoa), Mont. Test. Brit. ii, p. 351, . . . 351
Vitrina (Rissoella), A. Ad. Ann. & Mag. vi, 332, 1860, . 397
Vitrinella (Rissoina), Morch. Mal. Blatt., p. 45, 1876, . . 392
Vittatus (Turbo), Donovan. Brit. Shells, v, t. 178, f. 61.
= Rissoa cingillus, Mont. 342

Waabitica (Cingula), Issel. Mal. Mar Rosso, 1869, p. 201, t. 2, fig. 10, ... 330
Watsoni (Rissoa), Monts. Nuova Revista, 27.
R. simulans, Mts. 338
Watsoni (Rissoa), Schwartz. Zool. Proc., p. 315, t. 35, f. 11, 1873, ... 337
Weinkauffi (Rissoa), Schwarz, Mss. Mittelm. Conch. ii, p. 312, 366
Weinkauffiana (Rissoina), Nevill. Journ. Asiat. Soc. l, Pt. 2, p. 163, 1881, ... 376
Weyville-Thompsoni (Rissoa), Jeff. Friele, Prelim. Report, 3, 369
Wood-Masoniana (Rissoina), Nevill. Hand List, p. 74, 1885, 374
Woodwardi (Rissoa), Cpr. Mazatlan Shells, p. 357, . . 372

Xanthias, Watson, Challenger Rept. xv, p. 589, pl. 44, fig. 5, . 334

Zancleana (Rissoa), Arad. in Tavola.
= R. sciutiana, Arad. & Ben. 354
Zebina, H. & A. Adams. Genera Rec. Moll. i, 328, 1854, 320, 389
Zebinella, Mörch. Mal. Blatt. xxiii, 47, 1876, . . 320, 385
Zeltneri (Rissoa), Folin. Les Meleagrinicoles, p. 47, t. 5, f. 1, 1867, ... 387
Zetlandica (Rissoa), Mont. Linn. Trans. xi, p. 194, t. 13, f. 3, 337
Zippora, Leach. Gray. Ann. Mag. N. Hist. xx, 1847, . 316, 331

REFERENCE TO PLATES.

(FOR PLATES 1–6 See p. 30.)

TRICHOTROPIDÆ.

Plate 7.

FIGURE. PAGE.

37. Trichotropis borealis. Dentition. Fischer's Manual f. 457, ... 40
38. Trichotropis borealis. Operculum. Ibid. f. 458, . . 40
39. Gyrotropis squamosa, Gabb. Proc. Philad. Acad. t. 17, f. 5, 1876, ... 41
40 Seguenzia formosa, Dentition. Trans. Conn. Acad. vi, t. 31, f. 14 b. 41
41. Seguenzia formosa. Operculum. Trans. Conn. Acad. vi. t. 31, f. 14 a. 41
42. Trichotropis bicarinata, Brod. & Sowb. Conch. Icon. f. 2, 42
43. Trichotropis tenuis, Smith (= bicarinata). Ann. Mag. N. Hist. 4 Ser. xx, 136, 1877, ... 42
44. Trichotropis quadricarinata, A. Ad. (= borealis). Reeve, Conch. Icon. f. 9, ... 43
45. Trichotropis conica, Moll. (= borealis). Ibid. f. 12, . 43
46, 47. Trichotropis borealis, Brod. & Sowb. Ibid. f. 1, . 42
47a. Trichotropis borealis, Brod. & Sowb. Forbes & Hanley, Brit. Moll. t. ii, f. 1, ... 42
48. Trichotropis costellata, Couth. (= borealis). Conch. Icon. f. 13, ... 43
49 Trichotropis cancellata, Hinds. Ibid. f. 3, ... 43
50. Trichotropis flavida, Hinds (= cancellata). Ibid. f. 6, 43
51. Trichotropis clathrata, A. Ad. Ibid. f. 10, ... 43
52. Trichotropis inermis, Hinds (= borealis). Ibid. f. 11, . 43
53. Trichotropis coronata, Gould. Archiv für Naturg. li, t. 16, f. 4, a. 43
54. Trichotropis coronata, Gould. Aurvillius, Arct. Hafsmoll. t. 12, f. 15, ... 43
55. Trichotropis cedonulli, A. Ad. Conch. Icon. f. 7 b. . 44
56. Trichotropis unicarnata, Brod. & Sowb. Ibid. f. 8, . 44
57. Trichotropis fimbriata, Jeffreys. Proc. Zool. Soc. t. 5, f. 7, 1885, ... 44
58. Trichotropis densistriata, Jeffreys. Ibid. t. 5, f. 8, 1885, 44
59. Trichotropis insignis, Midd. (= borealis). Aurivillius, Arct. Hafsmoll. t. 12, f. 17, ... 43

Plate 8.

60. Trichotropis Kroyeri, Phil. Aurivillius, Arct. Hafsmoll. t. 12, f. 13, ... 44

FIGURE. PAGE.

61. Trichotropis Kroyeri, Phil. Conch. Icon. f. 4, . . 44
62, 63. Trichotropis arctica, Midd. Midd. Mal. Ross. t. 9, f. 12, 14, ... 44
64. Trichotropis solida, Aur. (= Kroyeri). Aurivillius, Arct. Hafsmoll. t. 12, f. 16, ... 44
66. Torellia vestita, Jeffreys. Brit. Conch. iv, t. 4, f. 1, . 46
67. Torellia delicata, Phil. Moll. Sicil. ii, t. 28, f. 3, . . 46
68. Torellia fimbriata, Verrill and Smith. Trans. Conn. Acad. v, t. 57, f. 27, ... 46
69. Separatista Blainvillei, Petit. Jour. de Conch. ii, t. 1, f. 5, ... 45
70. Separatista Chemnitzii, A. Ad. Genera Rec. Moll. t. 14, f. 6, ... 45
71. Seguenzia formosa, Jeffreys. Trans. Conn. Acad. vi, t. 31, f. 14, ... 46
72, 73. Seguenzia formosa, var. lineata, Watson. Voy. Challenger xv, t. 7, f. 1, ... 46
74. Seguenzia critima, Verrill. Trans. Conn. Acad. vi, t. 31, f. 15, ... 47
75. Seguenzia elegans, Jeffreys. Zool. Proc. t. 5, f. 1, 1885, . 47
76. Seguenzia tricarinata, Jeffreys. Ibid. t. 5, f. 2, 1885, . 47
77, 78. Seguenzia Ionica, Watson. Voy. Challenger xv, t. 7, f. 3, ... 47
79, 80. Seguenzia trispinosa, Watson. Ibid. t. 7, f. 4, . . 47
81, 82. Seguenzia carinata, Jeffreys. Ibid. t. 7, f. 2, . . 47
83. Seguenzia carinata, Jeffreys. Zool. Proc. t. 5,f. 3, 1885. . 47
84, 85. Seguenzia reticulata Phil. Moll. Sicil. ii, t. 25, f. 6, 48
86, 87. Seguenzia laxa, Jeffreys. Zool. Proc. t. 5, f. 4, 1885, 48
88. Trichotropis insignis, Midd. Conch. Icon. f. 5a. . . 45

IANTHINIDÆ.

Plate 9.

89. Animal of Ianthina, with its float and eggs. Quoy, Voy. Astrol. t. 29, f. 1, ... 33
90. Ianthina fibula, Reeve. Dentition. Troschel, Gebiss, ii, t. 14, f. 5, ... 33
91. Ianthina violacea, Ad. Animal. Ads. Genera Rec. Moll. t. 69, f. 1, ... 33
92, 93. Ianthina nitens, Mke. Jaws. Troschel, Gebiss. ii, t. 13, f. 15, 16, ... 33
94. Ianthina planospirata, Ad. and Reeve. Conch. Icon. f. 9, 36
95. Ianthina casta, Rve. (= planospirata). Ibid. f. 4, . 36
96. Ianthina cærulata, Rve. (planospirata). Ibid. f. 7, . 36
97. Ianthina depressa, Rve. (= planospirata). Ibid. f. 14a. 36
98. Ianthina balteata, Rve. (= planospirata). Ibid. f. 11, . 36
99. Ianthina communis, Lam. (= fragilis, Lam.) Ibid. f. 5, 36
100. Ianthina Britannica, Leach. Ibid. f. 13, . . . 37

FIGURE. PAGE.

1. Ianthina Smithiæ, Rve. (= Britannica). Ibid. f. 15, . 37
2. Ianthina grandis, Rve. (Britannica). Ibid. f. 3, . . 37
3. Ianthina striulata, Carp. (= Carpenteri, Mörch). Specimen. 36
4. Ianthina fragilis, Orb. Voy. Amer. Merid. t. 61, f. 8, . 36
5. Ianthina fibula, Rve. (= Britannica.) Conch. Icon. f. 17b. 37

PLATE 10.

6. Ianthina affinis, Rve. (= Britannica). Conch. Icon. f 2, b. 37
7. Ianthina roscola, Rve. (= Britannica). Ibid. f. 1, a. . 37
8. Ianthina involuta, Rve. (= Britannica). Ibid. f. 12, b. 37
9. Ianthina Africana, Rve. (= Britannica). Ibid. f. 8, b. . 37
10. Ianthina trochoidea, Reeve. Ibid. f. 10, b. 37
11. Ianthina nitens, Menke. (= globosa, Swn.) Ibid. f. 16, 37
12. Ianthina globosa, Swn. Ibid. f. 18, b. 37
13. Ianthina decollata, Carp. (= globosa). Ibid. f. 19, . 37
14. Ianthina iricolor, Rve. (= globosa). Ibid. f 23, . . 37
15. Ianthina pallida, Harvey. Ibid. f. 20, b. 37
16. Ianthina striolata, Ad. and Reeve. (= pallida). Ibid. f. 24 a. 37
17. Ianthina exigua, Lam. Ibid. f. 21, ... 37
18. Ianthina capreolata, Montr. (= exigua). Jour. de Conch. 2 Ser. iv, t. 2, f. 4, ... 38
19. Ianthina bifida, Nutt. (= exigua). Conch. Icon. f. 25, b. 38
20. Ianthina Vinsoni, Desh. (= exigua). Moll. Ile Reunion, t. 11, f. 9, ... 38
21. Ianthina umbilicata, Orb. (= exigua). Moll. Cuba. t. 20, f. 22, ... 38
22. Ianthina umbilicata, Orb. (= exigua). Conch. Icon. f. 22, b. 38
23. Recluzia Hargravesii, Cox. Zool. Proc. t. 16, f. 8. 1870, 38
24. Recluzia Johnii, Chemn. Mart. & Chemn. Conch. Cab. xi, f. 2077, ... 38
25. Recluzia Rollandiana, Recluz. Jour. de Conch. iv, t. 5, f. 12, ... 38
26. Recluzia Annamitica, Wattebled. Ibid. t. 3, f. 4, 1886. 38
27. Recluzia Montrouzieri, Souverb. Ibid. t. 1, f. 8, 1872, . 38
28. Recluzia Jehennei, Petit. Ibid. iv, t. 5, f. 3, ... 39
29. Recluzia globosa, E. A. Smith. Jour. Linn. Soc. xii, t, 30, f. 8, ... 39

SCALARIDÆ.

PLATE 11.

30. Scalaria tenuicostata, Mich. Radula. Fischer's Manual, 776, ... 49

FIGURE. PAGE.

31. Scalaria pretiosa, Lam. Reeve, Conch. Icon. f. 4, . . 54
32. Scalaria crenulata, Pease. Am. Jour. Conch. iii, t. 24 f. 13, ... 54
33. Scalaria neglecta, Rve. (= Pallasi). Conch. Icon, f. 1, 54
34. Scalaria neglecta, Ads. and Reeve. Voy. Samarang. t. 11, f. 15, ... 55
35. Scalaria inclyta, Melvill (= neglecta). Jour. of Conch. iv, t. 11, f. 1, ... 55
36. Scalaria imperialis, Sowb. Conch. Icon. f. 6, . . . 55
37. Scalaria bullata, Sowb. Conch. Icon. f. 8, . . . 55
38, 39, Scalaria obesa, Sowb. Ibid. f. 22 a, b. . . . 55
40. Scalaria alata, Sowb. Ibid. f. 15, ... 55
41. Scalaria fasciata, Sowb. Ibid. f. 13, ... 55
42. Scalaria marmorata, Sowb. Thes. Conch. i, t. 32, f, 9, . 56
43. Scalaria replicata, Sowb. Ibid. f. 23, ... 56
44. Scalaria tenuicostata, Sowb. Ibid. f. 76, . . . 56
45, 46. Scalaria latifasciata, Sowb. Reeve, Conch. Icon. f. 117a. 56
47. Scalaria trifasciata, De Haan (= Clementina). Ibid. f. 47a. 56
48. Scalaria Clementina, Grat. Mem. sur les Moll. t. 3, f. 4, 56
49. Scalaria bulbulus, Sowb. Thes. Conch. f. 85, . . . 56
50. Scalaria optabilis, A. Ad. Conch. Icon. f. 85, . . 56
51. Scalaria tenuilirata, Sowb. Ibid. f. 118, . . . 57
52. Scalaria laxata, Sowb. Thes. Conch. t. 32, f. 8, . . 57
53, 54. Scalaria hyalina, Sowb. Ibid. f. 21, 22, . . . 57
55. Scalaria soluta, Dunker. Jour. Philad. Acad. viii, t, 29, f. 5, ... 57
56. Scalaria semidisjuncta, Jeffreys. Zool. Proc. t. 10, f. 7, 1884, ... 57
57. Scalaria crassa, Sowb. Conch. Icon. f. 25, . . . 59

Plate 12.

58. Scalaria principalis, Pallas. Chemnitz, Conch. Cab. iv, t. 122, f. 1428, ... 57
56. Scalaria costulata, Kiener. Coq. Viv. t. 2, f. 4, . . 57
60. Scalaria statuminata, Sowb. Thes. Conch. t. 35, f. 127, 58
61. Scalaria obtusa, Sowb. Conch. Icon. f. 48, . . . 58
62, 63. Scalaria Krebsii, Mörch. Jour. Philad. Acad. viii, t. 29, f. 12, ... 58
64. Scalaria Swiftii, Morch. Specimen. 58
65. Scalaria inconspicua, Sowb. Conch. Icon. f. 58, . . 58
66. Scalaria nana, Jeffreys. Zool. Proc. t. 10, f. 6a. 1884, . 58
67. Scalaria dubia, Sowb. Conch. Icon. t. 10, f. 45, b. . . 60
68. Scalaria striata, Gray (= dubia). Voy. Fly, ii, t. 2, f. 9, 60
69. Scalaria lyra, Sowb. Conch. Icon. f. 23, . . . 59
70. Scalaria undulatissima, Sowb. Ibid. f. 121, . . . 60

FIGURE. PAGE.
71. Scalaria irregularis, Sowb. Thes. Conch. f. 40, . . 60
72. Scalaria similis, Sowb. Ibid. f. 90, ... 60
73. Scalaria miranda, Smith (= Smithii). Conch. Icon. f. 73, ... 60
74. Scalaria pulcherrima, Rol. (= Catanuanensis). Conch. Icon. f. 68a. 61
75. Scalaria friabilis, Sowb. Conch. Icon. f. 52, . . . 61
76. Scalaria indistincta, Sowb. Ibid. f. 109, . . . 61
77. Scalaria subnudata, Sowb. (= tenera). Ibid. f. 111, . 61
78. Scalaria tenera, Jeffreys. (= Jeffreysi). Zool. Proc. t. 10, f. 9, 1884, ... 62
79. Scalaria crispata, Pease. Am. Jour. Conch. iii, t. 24, f. 12, ... 61
80. Scalaria immaculata. Sowb. Thes. Conch. f. 58, . . 61
81. Scalaria lineolata, Sowb. Thes. Conch. f. 48, . . 59
82, 83. Scalaria rubrolineata, Sowb. Ibid. f. 83, 84, . . 60
84. Scalaria aurita, Sowb. Ibid. f. 62, ... 59
85. Scalaria glabrata, Hinds. Ibid. f. 101, ... 59
86. Scalaria maculosa, Ads. and Reeve. Conch. Icon. f. 103, 59
87. Scalaria Mariei, Crosse. Jour. de Conch. t. 2, f. 7, 1874, 59

PLATE 13.

88. Scalaria gradata, Hinds. Thes. Conch. f. 109, . . 62
89. Scalaria pyramidalis, Sowb. Ibid. f. 4, ... 62
90, 91. Scalaria aculeata, Sowb. Ibid. f. 35, 36, . . . 63
92. Scalaria eximia, Ad. and Reeve. Conch. Icon. f. 87, b. . 63
93. Scalaria porrecta, Hinds. Thes. Conch. f. 139, . . 63
94. Scalaria Austro-Caledonica, Montr. Jour. de Conch. t. 2, f. 5, 1860, ... 62
95. Scalaria muricata, Risso. Conch. Icon. f. 43, . . 63
96. Scalaria foliaceicosta, d'Orb. Jour. Philad. Acad. viii, t. 29, f. 6, ... 63
97. Scalaria tenuis, Sowb. (= occidentalis). Thes. Conch. f. 7, ... 63
98. Scalaria echinaticosta, d'Orb. Moll. Cuba. t. 11, f. 5, . 64
99. Scalaria centiquadra, Mörch. Jour. Philad. Acad. viii, t. 29, f. 4. 64
100. Scalaria denticulata, Sowb. Conch. Icon. f. 42, . . 64
1. Scalaria mitræformis, Sowb. Thes. Conch. f. 30, . . 63
2. Scalaria Algeriana, Weink. Zool. Proc. t. 10, f. 5, 1884, 64
3. Scalaria vittata, Jeffreys. Ibid. t. 10, f. 4, 1884, . . 64
4. Scalaria brevis, d'Orb. Voy. Amer. merid. t. 75, f. 22, 58
5. Scalaria pernobilis, Fischer and Bernardi. Jour. de Conch. 2 Ser. i, t. 8, f. 2, ... 65
6. Scalaria Pourtalesii, Verrill and Smith. Trans. Conn. Acad. v, t. 57, f. 32, ... 64
7. Scalaria soluta, Tiberi (= frondosa). Jour. de Conch. t. 5, f. 3, 1868, ... 65

FIGURE. PAGE.
8. Scalaria turbinata, Conrad. Jour. Philad. Acad. vii, t. 20, f. 26, ... 64
9. Scalaria texturata, Gould. Moll. Wilkes Exped. f. 244, 66
10. Scalaria gracilenta, Gould. Ibid. f. 245, . . . 66
11. Scalaria consors, Crosse and Fischer. Jour. de Conch. t. 3, f. 11, 1865. 74
12. Scalaria symmetrica, Pease. Am. Jour. Conch. iii, t. 24, f. 14, ... 66
13. Scalaria angusta, Dunker. Moll. Japon, t. 1, f. 11, . 65
14. Scalaria decussata, Pease. Am. Jour. Conch. iii, t. 24, f. 10, ... 65
15. Scalaria Japonica, Dunker. Moll. Japon, t. 1, f. 13, . 65
16. Scalaria Paumotensis, Pease. Am. Jour. Conch. iii, t. 24, f. 11, ... 65
17. Scalaria Georgettinæ, Kiener. Thes. Conch. f. 77, . . 73
18, 19. Scalaria Philippinarum, Sowb. Ibid. f. 3, 2, . . 66

PLATE 14.

20. Scalaria Jukesiana, Forbes. Conch. Icon. f. 80, . . 66
21. Scalaria attenuata, Sowb. (= subauriculata). Ibid. f. 113, ... 67
22. Scalaria subauriculata, Souv. Specimen. . . . 67
23. Scalaria casta, A. Ad. Conch. Icon. f. 86, . . . 67
24. Scalaria Japonica, Dunker. Ibid. f. 122, . . . 65
25. Scalaria concinna, Sowb. Thes. Conch. f. 63, . . 67
26. Scalaria multicostata, Sowb. Ibid. f. 96, . . . 67
27. Scalaria obliqua, Sowb. Ibid. f. 69, ... 67
28, 29. Scalaria gracilis, Sowb. Ibid f. 33, 34, . . . 67
30. Scalaria albolineata, Sowb. Conch. Icon. f. 57, . . 68
31. Scalaria Mindoroensis, Sowb. Thes. Conch. f. 91. . . 67
32. Scalaria pulcherrima, Sowb. Ibid. f. 92, . . . 68
33. Scalaria pumila, A. Ad. Conch. Icon. f. 79, . . . 68
34. Scalaria creberrima, Hinds. Ibid. f. 69, . . . 68
35. Scalaria lactea, Krauss. Ibid. f. 93, ... 68
36. Scalaria sulcata, Sowb. Thes. Conch. f. iii, . . . 68
37. Scalaria vestalis, Hinds. Conch. Icon. f. 101, . . 69
38. Scalaria subtilis, Sowb. Thes. Conch. f. 137, . . 68
39. Scalaria delicatula, Crosse. Conch. Icon. f. 115, . . 69
40. Scalaria ovalis, Sowb. Ibid. f. 96, ... 69
41. Scalaria connexa, Sowb. Thes. Conch. f. 98, . . . 69
42. Scalaria aciculina, Hinds. Thes. Conch. f. 100, . . 69
43. Scalaria polita, Sowb. Conch. Icon. f. 77, . . . 69
44. Scalaria Elenensis, Sowb. Ibid. f. 102, ... 70
45. Scalaria hexagona, Sowb. Thes. Conch. f. 67, . . 70
46. Scalaria curvilineata, Sowb. Conch. Icon. f. 49, . . 70
47. Scalaria principalis, Sowb. (= ducalis, Mörch). Ibid. f. 12, ... 69
48. Scalaria Indianorum, Carp. Ibid. f. 81, ... 70

FIGURE. PAGE.
49. Scalaria tincta, Carp. Specimen. 70
50. Scalaria venosa, Sowb. Mörch, Jour. Philad. Acad. viii, t. 29, f. 9, ... 70
51. Scalaria elegans, Orb. (= Orbignyi). Voy. Amer. merid. t. 54, f. 2, ... 70
52. Scalaria tenuistriata, d'Orb. Ibid. t. 54, f. 6, . . . 61
53. Scalaria angulata, Say. Amer. Conch. t. 27, . . . 70
54. Scalaria gradatella, Mörch. Jour. Philad. Acad. viii, t. 29, f. 11, ... 71
55. Scalaria unifasciata, Sowb. Thes. Conch. f. 68, . . 71
56. Scalaria undecimcostata, Mörch. Specimen. . . . 71
57. Scalaria fragilis, Hanley (= eburnea). Thes. Conch. f. 66, ... 71
58. Scalaria albida, Orb. (= eburnea). Moll. Cuba. t. 10, f. 25, ... 71
59. Scalaria teres, Busch. Trans. Conn. Acad. vi, t. 45, f. 8, 71
60. Scalaria modesta, Ads. Conch. Icon. f. 78, . . . 70

Plate 15.

61. Scalaria Dalliana, Verrill and Smith. Trans. Conn. Acad. v, t. 57, f. 33, ... 73
62. Scalaria Novangliæ, Couth. Bost. Jour. t. 3, f. 5, . . 71
63. Scalaria multistriata, Say. Am. Conch. t. 27, . . 72
64. Scalaria candidissima, Monts. Jour. de Conch. t. 2, f. 5, 1877, ... 72
65. Scalaria communis, Lam. Thes. Conch. f. 18, . . 72
66. Scalaria communis, Lam. Kiener, Coq. Viv. t. 1, f. 2, . 72
67. Scalaria Turtonis, Turton. Thes. Conch. f. 107, . . 72
68. Scalaria Cantrainei, Weink. Cantr. Moll. Medit. t. 6, f. 16, ... 72
69. Scalaria Trevelyana, Leach. Forbes, Brit. Moll. t. 70, f. 7,. 72
70. Scalaria clathratula, Ads. Ibid. t. 70, f. 4, . . . 73
71. Scalaria coronata, Phil. (= Hellenica). Moll. Sicil. ii, t. 23, f. 7, ... 73
72. Scalaria pulchella, Bivona. Cox. viv. t. 6, f. 19, . . 73
73. Scalaria Bairdii, Smith. Zool. Proc. t. 75, f. 14, 1871, . 73
74. Scalaria Dianæ, Hinds. Conch. Icon. f. 89, . . . 74
75. Scalaria Zelebori, Frauenf. Reise Novara, t. 1, f. 6, . 78
76. Scalaria coronata, Lam. (= lamellosa). Encyc. Meth. t. 451, f. 5, ... 74
77. Scalaria lamellosa (= pseudoscalaris). Coq. viv, t. 3. f. 7, ... 74
78. Scalaria Nautlæ, Mörch. Jour. Philad. Acad. viii, t. 29, f. 12, ... 75
79. Scalaria Andrewsii, Verrill. Trans. Conn. Acad. v, t. 57, f. 35, ... 75
80. Scalaria obtusicostata, Sars. (= coarctata). Moll. Norv. t. 22, f. 9, ... 76

FIGURE. PAGE.
81. Scalaria vulpina, Hinds. Conch. Icon. f. 113, . . 78
82. Scalaria monocycla, Lam. (= lamellosa). Coq. viv, t. 3, f. 9, ... 74
83. Scalaria perplexa, Pease. (= lamellosa). Specimen. . 74
84. Scalaria clathrus, Linn. (=lamellosa). Thes. Conch. f. 131, ... 74
85. Scalaria longissima, Seguenza. Zool. Proc. t. 10, f. 3, 1884, ... 75
86. Scalaria varicosa, Sars. (= coarctata). Moll. Norv. t. 34, f. 9, ... 76
87. Scalaria Ochotensis, Midd. Reise, t. 12, f. 12, . . 76
88. Scalaria Magellanica, Phil. Conch. Icon. f. 82, . . 76

PLATE 16.

89. Scalaria borealis, Gould. Conch. Icon. f. 75, . . . 76
90. Scalaria australis, Lam. Ibid. f. 3, ... 76
91. Scalaria Grœnlandica, Chemn. Ibid. f. 107, . . . 76
92. Scalaria acus, Watson. Zool. Proc. t. 10, f. 8, 1884, . 75
93. Aclis ventrosa, Jeffreys. Friele, Bidrag, t. 1, f. 7, b. . 87
94. Scalaria Loveni, A. Ad. Jahrb. Mal. Gesell. iii, t. 4, f. 4, 76
95. Scalaria uncinaticosta, d'Orb. Moll. Cuba, t. 11, f. 26, . 77
96. Scalaria Candeana, d'Orb. Ibid. t. 11, f. 29, . . . 77
97. Scalaria crenulata, Kien. (= crenata). Thes. Conch. f. 123, ... 77
98. Scalaria Hotessieriana, Orb. (= crenata). Specimen. . 77
99, 100. Scalaria diadema, Sowb. Thes. Conch. f. 121, 122, 78
1. Scalaria crenatoides, Carp. Specimen. 77
2, 3. Scalaria raricostata, Lam. Thes. Conch. f. 79, 80, . 78
4, 6. Scalaria nuda, Sowb. (= turricula). Conch. Icon. f. 110, ... 79
5. Scalaria Martinii, Wood. Thes. Conch. f. 78, . . 78
7. Scalaria Morchii, Sowb. (= erronea). Conch. Icon. f. 76, ... 79, 82
8. Scalaria suturalis, Hinds. Ibid. f. 104, ... 79
9. Scalaria unicostata, Sowb. (= lineata). Conch. Icon. f. 55, ... 79
10. Scalaria costulata, Mighels and Adams. Tryon's Marine Conch. t. 11. f. 132, ... 80
11. Scalaria granulosa, Quoy. Conch. Icon. f. 35, . . 80
12. Scalaria Eschrichti, Möller. Ibid. f. 83, ... 80
13. Scalaria turricula, Sowb. Thes. Conch. f. 88, . . 79
14. Scalaria lineata, Say. Ibid. f. 50, ... 79
15. Scalaria crassicosta, Gray. (= crenata). Ibid. f. 119, . 77
16. Scalaria magnifica, Sowb. Ibid. f. 103, ... 78
17. Scalaria geniculata, Brocchi. Foss. Tert. ii, t. 16, f. 1, . 79
18. Scalaria undulata, Sowb. (= costulata). Conch. Icon. f. 108, ... 80
19. Scalaria subdecussata, Cantraine. Mal. Medit. t. 6, f. 24, 80

FIGURE. PAGE.

20. Scalaria gracilis, Verrill. Trans. Conn. Acad. v, t. 57, f. 31, ... 80

PLATE 17.

21, 22. Scalaria decussata (= Kieneri, Canefri). Conch. Icon. f. 114 a, b. 81
23. Scalaria varicosa, Lam. Thes. Conch. f. 126, . . 81
24. Scalaria cochlea, Sowb. Ibid. f. 142, ... 81
25. Scalaria pumicea, Brocchi. (= cochlea). Foss. tert. ii, t. 7, f. 3, ... 81
26. Scalaria decussata. (= Kieneri, Canefri). Coq. viv, t. 7, f. 23, ... 81
27. Scalaria abbreviata, Sowb. Conch. Icon. f. 124, . . 81
28. Scalaria bicarinata, Sowb. Thes. Conch. f. 113, . . 82
29. Scalaria attenuata, Pease. Conch. Icon. f. 71, . . 82
30, 35. Scalaria acuminata, Sowb. Ibid. f. 74, b. . . 83
31. Scalaria Leeana, Verrill. Trans. Conn. Acad. v, t. 57, f. 34, ... 82
32. Scalaria crassilabrum, Sowb. Conch. Icon. f. 120 a. . 82
33. Scalaria multiperforata, Sowb. Ibid. f. 125, . . . 82
34. Scalaria formosissima, Jeffreys. Zool. Proc. t. 10, f. 10, 1884, ... 62
36. Scalaria prælonga, Jeffreys. Ibid. t. 10, f. 11, 1884, . 83
37. Scalaria fusca, Sowb. Thes. Conch. f. 138, . . . 83
38. Scalaria minor, Sowb. Conch. Icon. f. 70, . . . 83
39. Scaliola bella, A. Ad. Jour. de Conch. t. 4, f. 6, 1868, . 85
40. Aclis attenuans, Jeffreys. Ann. Mag. N. Hist. 5 Ser. xi, t. 16, f. 3, ... 88
41. Scalaria elegans, Ads. (= jucunda). Jour. de Conch. t. 4, f. 4, 1868, ... 84
42. Scaliola Caledonica, Crosse. Ibid. t. 6, f. 3, 1871, . . 85
43. Aclis Gulsonæ, Clark. Forbes & Hanley, Brit. Moll., t. 132, f. 6, ... 89
44. Aclis scitula, A. Ad. Journ. de Conch., t. 4, f. 3, 1868, . 89
45. Scalaria concinna, Angas. Zool. Proc., t. 44, f. 14, 1867, 85
46. Scalaria bellula, A. Ad. Jour. de Conch., t. 4, f. 10, 1868, ... 85
47. Scaliola arenosa, A. Ad. Voy. Challenger, xv, t. 46, f. 11, 85
48. Scalaria miranda, A. Ad. Jour. de Conch., t. 4, f. 9, 1868, 84
49, 56. Aclis supranitida, Wood. Forbes & Hanley, Brit. Moll., t. 90, f. 2, ... 87
50. Aclis ascaris, Turton. Ibid., t. 88, f. 8, ... 86
51. Aclis mizon, Watson. Voy. Challenger, t. 34, f. 1, . . 89
52. Aclis hyalina, Watson. Ibid., t. 34, f. 2, . . . 89
53. Scalaria Webbii, d'Orb. Moll. Canaries, t. 6, f. 14, . . 73
54. Aclis sarissa, Watson. Voy. Challenger, xv, t. 34, f. 3, . 88
55. Aclis minutissima (= supranitida), Ibid. xv, t. 33, f. 9, . 88
57. Aclis exigua, Sars. Moll. Norv., t. 22, f. 8, . . . 88

FIGURE. PAGE.

Plate 18.

58. Eglisia spirata, Sowb. Conch. Icon. v, f. 1, . . . 86
59. Eglisia lanceolata, Reeve. Ibid., f. 2, ... 87
60. Eglisia tricarinata, Ads. and Reeve. Voy. Samarang., t. 12, f. 8, ... 86
61. Eglisia conspersa, Ads. and Reeve. Ibid., t. 12, f. 15, . 86
62. Eglisia gracilis, Maltzan. Nachr. Mal. Gesell. xv, 98, . 86
63. Aclis carinata, Smith. Zool. Proc., t. 75, f. 20, 1871, . 87
64. Stilbe acuta, Jeffreys. Ibid., t. 10, f. 2, 1884, . . . 90
65. Aclis Walleri, Jeffreys. Brit. Conch., t. 72, f. 4, . . 87
66. Aclis unica, Mtg. Forbes & Hanley, Brit. Moll., t. 90, f. 5, ... 88
67. Aclis gracilis, Jeffreys. Zool. Proc., t. 26, f. 1, 1884, . 88
68. Scalaria striata, Watson. Voy. Challenger, xv, t. 9, f. 8, 85
69. Aclis striatus, Jeffr. (= Jeffreysii.). Zool. Proc., t. 26, f. 2, 1884, ... 89
70. Aclis striata, Verrill. Trans. Conn. Acad. v, t. 58, f. 13, . 87
71. Aclis tenuis, Verrill. Ibid. v, t. 58, f. 19, . . . 87
72, 73. Aclis glabra, Sars. Moll. Norv., t. 11, f. 15, 14, . 88
74. Scalaria vermetiformis, Watson. Voy. Challenger, xv, t. 9, f. 6, ... 57
75. Scalaria pyrrhias, Watson. Ibid., xv, t. 9, f. 7, . . 80
76. Scalaria tortilis, Watson. Voy. Challenger, xv, t. 9, f. 1, 75
77. Scalaria dentiscalpium, Watson. Ibid., t. 9, f. 3, . . 82
78. Scalaria philtata, Watson. Ibid., t. 9, f. 5, . .
79. Scalaria funiculata, Watson. Ibid., t. 9, f. 4, . .
80. Scalaria acus, Watson. Ibid., t. 9, f. 2, ... 75

CERITHIIDÆ.

Plate 19.

1. Cerithium vulgatum, Brug. Radula. Troschel, Gebiss der Schnecken, ... 113
2. Potamides decollatus, Linn. Radula. Ibid., . . . 115
3. Triforis perversus, Linn. Radula. Fischer, Mass. Conch., f. 445, ... 121
4. Terebralia palustris, Brug. Showing the columellar plications and interior teeth of the varix. Fischer, Man. Conch., f. 447, ... 116
5. Aphanistylus Charbonnieri, Petit. Fischer, Man. Conch., f. 450, ... 118
6. Cerithidea obtusa, Lam. Suspended by glutinous filaments. Ibid., f. 449, ... 112
7. Eustoma tuberculatum, Piette. Ibid., f. 452, . . . 120
8. Brachytrema Wrighti, Cotteau. Ibid., f. 453, . . . 113
9. Brachytrema filosum, Buvign. Ibid., f. 454, . . . 113
10. Pyrazisinus campanulatus, Heilprin. Expl. Florida. . 116

FIGURE. PAGE.

11, 12. Terebralia sulcatus, Brug. Quoy. Voy. Astrol., t. 54, f. 22, ... 116
13, 14. Cerithium nodulosum, Brug. Quoy, Ibid., t. 54, f. 5, 112, 122

PLATE 20.

15. Cerithium nodulosum, Brug. Kiener, Iconog., t. 2, f. 1, . 122
16. Cerithium Erythræonense, Lam. Ibid., t. 3, f. 2, . . 123
17, 18. Cerithium, columna, Sowb. Thes. Conch., f. 56, 58, . 123
19. Cerithium Menkei, Desh. (= columna). Moll. Reunion, t. 11, f. 15, ... 123
20. Cerithium scabridum, Reeve (= columna, Var.). Conch. Icon., sp. 52, ... 123
21. Cerithium citrinum, Sowb. Thes. Conch., f. 66, . . 123
22. Cerithium bicolor, Hombr. et Jacq. (= citrinum). Voy. Astrol. et Zel., t. 23, f. 14, ... 123
23. Cerithium siphonatum, Sowb. (= citrinum). Conch. Icon., f. 90, b. 123
24. Cerithium suturale, Phil. Thes. Conch., f. 52, . . 123
25. Cerithium echinatum, Lam. Conch. Icon., f. 10, 123, . 123
26. Cerithium album, Hombr. et Jacq. (= echinatum). Voy. Astrol. et Zel., t. 23, f. 23, ... 124
27. Cerithium Adansonii, Reeve (= echinatum). Conch. Icon., f. 11, ... 124
28. Cerithium Ruppellii, Phil. Conch. Icon., f. 6, . . 12†
29. Cerithium Savignyi, Fischer (= Ruppellii). Savigny, Desc. Egypt, t. 4, f. 8, ... 124
30. Cerithium Adenense, Sowb. Conch. Icon., f. 89, . . 124
31. Cerithium armatum, Phil. Thes. Conch., f. 96, . . 124
32. Cerithium armatum, Phil. Conch. Icon., f. 14, b, . . 124

PLATE 21.

33. Cerithium nigropunctatum, Sowb. Thes. Conch., f. 97, . 124
34. Cerithium Novæ Hollandiæ, A. Ad. Conch. Icon., f. 30, 124
35. Cerithium filosum, Sowb. Ibid., f. 82, ... 125
36. Cerithium corallinum, Dufresne. Thes. Conch., f. 63, . 125
37. Cerithium sculptum, Pease. Specimen, ... 125
38. Cerithium vulgatum, Brug. Thes. Conch., f. 43, . . 125
39. Cerithium subnodosum, Ads. (= vulgatum). Conch. Icon., f. 4, ... 125
40. Cerithium alucaster, Brocc. (= vulgatum). Moll. Roussillon, t. 22, f. 4, ... 126
41. Cerithium spinosa, Blainv. (= vulgatum). Ibid., t. 22, f. 7, ... 126
42. Cerithium muticum, B. D. D. (= vulgatum). Ibid., t. 22, f. 8, ... 126
43. Cerithium gracile, Phil. (= vulgatum). Ibid., t. 22, f. 9, 126
44. Cerithium longissima, B. D. D. (= vulgatum). Ibid., t. 22, f. 10, ... 126

FIGURE. PAGE.

45. Cerithium seminuda, B. D. D. (= vulgatum). Ibid., t. 22, f. 11, ... 126
46. Cerithium repanda, B. D. D. (= vulgatum). Ibid., t. 22, f. 14, ... 126
47. Cerithium pulchella, Phil. (= vulgatum). Ibid., t. 22, f. 15, ... 126
48. Cerithium Mediterraneum, Desh. (= rupestre). Thes. Conch., f. 132, ... 126
49. Cerithium plicata, Phil. (= rupestre). Moll. Roussillon, t. 23, f. 5, ... 126
50. Cerithium minor, B. D. D. (= rupestre). Ibid., t. 23, f. 7, 126
51. Cerithium nebulosum, Sowb. (= adustum). Conch. Icon., f. 7, b, ... 126
52. Cerithium adustum, Kiener. Ibid., f. 12, . . . 126
53. Cerithium æmulum, Sowb. Nouv. Archives du Mus. iv, t. 18, f. 138, ... 127
54. Cerithium cæruleum, Sowb. Thes. Conch., f. 61, . . 127

PLATE 22.

55, 56. Cerithium Guinaicum, Phil. Thes. Conch., f. 127, 126, 127
57. Cerithium circinatum, A. Ad. Conch. Icon., f. 61, . . 127
58. Cerithium Sandwichense, Sowb. Ibid., f. 37, . . . 127
59. Cerithium tessellatum, Sowb. Thes. Conch., f. 134, . 127
60, 61. Cerithium uncinatum, Gmel. Thes. Conch., f. 78, 79, 127
62. Cerithium umbonatum, Sowb. (= eburneum). Ibid., f. 95, 129
63. Cerithium litteratum, Born. Ibid., f. 129, . . . 128
64. Cerithium litteratum, Born. Conch. Icon., f. 25, b, . . 128
65. Cerithium musicum, Sowb. Ibid., f. 40, ... 128
66. Cerithium semiferrugineum, Lam. Thes. Conch., f. 75, . 128
67. Cerithium pictum, Wood. Ibid., f. 121, ... 128
68. Cerithium atratum, Born. Conch. Icon., f. 32, . . 128
69, 70. Cerithium caudatum, Sowb. (= atratum). Thes. Conch., f. 71, 87, ... 129
71. Cerithium eburneum, Brug. Conch. Icon., f. 35, a, . 129
72. Cerithium eburneum, Brug. Thes. Conch., f. 83, . . 129
73, 74. Cerithium Novæ-Hiberniæ, A. Ad. (= eburneum). Ibid., f. 84, 85, ... 129
75. Cerithium fenestratum, Sowb. (= eburneum). Conch. Icon., f. 39, ... 129
77. Cerithium graciliforme, Sowb. (= eburneum). Ibid., f. 49, 129
77a. Cerithium pulicarium, Phil. (= eburneum). Abbild. iii, t. 1, f. 14, ... 129
78. Cerithium striatissimum, Sowb. Conch. Icon., f. 31, . 129
79. Cerithium striatissimum, Sowb. Thes. Conch., f. 86, . 129
80. Cerithium planispiratum, Sowb. Ibid., f. 91, . . . 129
81. Cerithium lentiginosum, Sowb. (= algicola). Conch. Icon., f. 77, ... 129
82. Cerithium algicola, C. B. Ad. Ibid., f. 63, . . . 129

Plate 23.

FIGURE. PAGE.

82, 83. Cerithium munitum, Sowb. Conch. Icon., f. 69, a, b, 129
84. Cerithium pyramidatum, Hombr. Jacq. Voy. Astr. et Zel., t. 23, f. 20, ... 129
85. Cerithium polygonum, Sowb. (= opportunum). Thes. Conch., f. 46, ... 130
86. Cerithium spathuliferum, Sowb. Conch. Icon., f. 50, a, . 130
87. Cerithium striatum, Hombr. Jacq. (= dialeucum). Voy. Astr. et Zel., t. 23, f. 16, ... 130
88. Cerithium dialeucum, Phil. Thes. Conch., f. 98, . . 130
89. Cerithium fusiforme, Sowb. (= proditum, Bayle). Ibid., f. 107, ... 130
90. Cerithium rostratum, Sowb. Conch. Icon., f. 95, b, . . 130
91. Cerithium rostratum, Sowb. Thes. Conch., f. 104, . . 130
92. Cerithium lissum, Watson. Voy. Challenger, xv, t. 40, f. 4, ... 130
93, 94. Cerithium nitidum, Hombr. et Jacq. Voy. Astrol. et Zel., t. 24, f. 30–33, ... 143
95. Cerithium coronatum, Sowb. (= custos). Conch. Icon., f. 48, a, ... 131
96. Cerithium coronatum, Sowb. (= custos). Thes. Conch.,
97. Cerithium invaginatum, Gould. Moll. Wilkes Exped., f. 169, a, ... 131
98, 99. Cerithium planum, Phil. Thes. Conch., f. 111, 112, . 131
100–1. Cerithium salebrosum, Sowb. Ibid., f. 115, 114, . . 131
2. Cerithium balteatum, Phil. Conch. Icon., f. 72, a, . . 131
3. Cerithium balteatum, Phil. Thes. Conch., f. 116, . . 131
4. Cerithium rubus, Mart. Conch. Icon., f. 75, . . . 131
5. Cerithium mitraeforme, Sowb. (= rubus). Ibid., f. 74, . 132
6. Cerithium mitraeforme, Sowb. (= rubus). Thes. Conch., f. 190, ... 132
7. Cerithium eximium, Sowb. (= rubus). Ibid., f. 192, . 132
8. Cerithium eximium, Sowb. (= rubus). Conch. Icon., f. 76, b, ... 132
9. Cerithium granosum, Kiener. (= rubus). Ibid., f. 73, . 132
10, 11. Cerithium tenellum, Sowb. Thes. Conch., f. 89, 90, . 132
12, 13. Cerithium muscarum, Say. Ibid., f. 108, 110, . . 132
14. Cerithium Torresii, Smith. Voy. Alert., t. 5, f., O, . . 136
15. Cerithium sordidulum, Gld. (= rubus). Moll. Wilkes Exped., f. 170, ... 132
16. Cerithium inflatum, Quoy. Thes. Conch., f. 170, . . 132
17. Cerithium Billeheustii, Petit. (= inflatum). Jour. de Conch. ii, t. 7, f. 3, ... 132
18. Cerithium breviculum, Sowb. (= inflatum). Thes. Conch., f. 143, ... 132

Plate 24.

FIGURE. PAGE.

19. Cerithium ocellatum, Brug. Thes. Conch., f. 59, . . 132
20, 21. Cerithium patulum, Sowb. Conch. Icon., f. 33a, 33b, 133
22. Cerithium pellucidum, Hombr. Jacq. Voy. Astrol. et Zel., t. 23, f. 24, ... 133
23. Cerithium Metcalfei, Sowb. (= inflatum). Thes. Conch., f. 157, ... 132
24. Cerithium Bornii, Sowb. (= carbonarium). Ibid., f. 175, 133
25, 27. Cerithium petrosum, Wood. (= tuberculatum). Ibid., f. 171, 172, ... 133
26. Cerithium petrosum, Wood. (= tuberculatum). Conch. Icon., f. 43a, ... 133
28. Cerithium pupa, Sowb. (= tuberculatum). Ibid., f. 84, . 133
29–31. Cerithium variegatum, Reeve. (= morus). Ibid., f. 41a–c, ... 134
32, 33. Cerithium morus, Lam. Thes. Conch., f. 159, 160, . 133
34. Cerithium carbonarium, Phil. Conch. Icon., f. 59, . . 133
35. Cerithium moniliferum, Dufresne. Ibid., f. 20, . . 134
36. Cerithium rugosum, Wood. (= patiens). Thes. Conch., f. 195, ... 134
37. Cerithium tuberculatum, Reeve. (= patiens). Conch. Icon., f. 21b, ... 134
38. Cerithium lemniscatum, Quoy. Conch. Icon., f. 27b, . 135
39. Cerithium bifasciatum, Sowb. Thes. Conch., f. 198, . 134
40. Cerithium nigrofasciatum, Sowb. Conch. Icon., f. 58, . 134
41. Cerithium gemma, Sowb. Thes. Conch., f. 51, . . 134
42. Cerithium rubrolineatum, Sowb. Ibid., f. 199, . . 135
43. Cerithium Californiæ, Sowb. Conch. Icon., f. 104, . . 134
44. Cerithium Thomasiæ, Sowb. Ibid., f. 108, . . . 225
45. Cerithium nivosum, Sowb. Ibid., f. 105, . . . 134
46. Cerithium corallinum, Sowb. Thes. Conch., f. 63, . . 125
47. Cerithium musivum, Hombr. et Jacq. Voy. Astrol. & Zel., t. 24, f. 23, ... 134

Plate 25.

47. Cerithium Traillii, Sowb. Conch. Icon., f. 24, . . 135
48, 49. Cerithium alternatum, Sowb. (= Traillii). Thes. Conch., f. 70, 73, ... 135
50. Cerithium robustum, Sowb. (= Traillii). Conch. Icon., f. 44, ... 135
51, 52. Cerithium purpurascens, Sowb. (= Traillii). Thes. Conch., f. 183, 184, ... 135
53. Cerithium splendens, Sowb. (= Traillii). Ibid., f. 191, . 135
54. Cerithium nitidum, Sowb. (= gentile). Ibid., f. 180, . 135
55. Cerithium vittatum, Sowb. Ibid., f. 194, . . . 134
56. Cerithium luctuosum, Hombr. Jacq. Voy. Astrol. et Zel., t. 23, f. 12, ... 135

FIGURE. PAGE.

57, 58. Cerithium gemmulatum, Hombr. Jacq., Ibid., t. 24, f. 3, 7, ... 134
59. Cerithium baccatum, Hombr. Jacq. Ibid., t. 24, f. 11, . 135
60. Cerithium millepunctatum, Hombr. Jacq. Ibid., t. 24, f. 13, 136
61. Cerithium ustum, Hombr. et Jacq. Ibid., t. 23, f. 18, . 136
62. Cerithium asperum, Pease. (= asperulum, Tryon). Conch. Icon., f. 96, ... 136
63. Cerithium dubium, Sowb. (= eludens). Ibid., f. 78, . 136
64. Cerithium nigrobalteatum, Smith. Voy. Alert, t. 5, f. N, 136
65. Cerithium acutum, Hombr. et Jacq. Voy. Astrol. et Zel., t. 24, f. 26, ... 134
66. Cerithium humile, Dunker. Moll. Japan, t. 2, f. 17, . 134
67. Cerithium Kobelti, Dunker. Ind. Moll. Maris Japon., t. 4, f. 8, ... 137
68. Cerithium Isseli, Pagenstecher. Savigny, Desc. Egypte, t. 4, f. 7, ... 137
69. Cerithium alveolus, Quoy. Voy. Astrol. et Zel., t. 24, f. 28, ... 137
70. Cerithium egenum, Gould. Moll. Wilkes' Exped., f. 171, 137
71. Cerithium ianthinum, Gould. Ibid., f. 173, . . . 137
72. Cerithium aspersum, Desh. (= ianthinum). Moll. Reunion, t. 11, f. 16, ... 137
73, 74. Cerithium Crossei, Desh. (= Maillardi). Ibid., t. 11, f. 12, 13, ... 137

PLATE 26.

75. Cerithium maculosum, Mighels. Conch. Icon., f. 97, . 137
76. Cerithium Nassoides, Sowb. (= maculosum). Ibid., f. 83a, 137
77. Cerithium diminutivum, Phil. Abbild. iii, t. 1, f. 17, . 138
78, 79. Cerithium zebrum, Kiener. Conch. Icon., f. 13, 6a, b, 138
80, 81, 82. Cerithium delectum, Sowb. (= zebrum). Ibid., f. 112a, b, c, ... 138
83, 84. Cerithium tenue, Sowb. (= Icarus). Ibid., f. 130a, b, 138
85. Cerithium interstriatum, Sowb. Ibid., f. 93, . . . 138
86. Cerithium unilineatum, Pease. Ibid., f. 99, . . . 138
87. Cerithium fucatum, Pease. Ibid., f. 102, . . . 138
88. Cerithium paxillum, Pease. Ibid., f. 115, . . . 138
89. Cerithium placidum, Gould. Ibid., f. 141, . . . 139
90. Cerithium alboliratum, Carp. Ibid., f. 109, . . . 139
91. Cerithium rarimaculatum, Sowb. Ibid., f. 103, . . 139
92. Cerithium obesum, Sowb. (= repletulum). Ibid., f. 62, . 139
93. Cerithium obesulum, Sowb. Ibid., f. 149, . . . 139
94. Cerithium Sagræ, d'Orb. Moll. Cuba, t. 23, f. 17, . . 140
95. Cerithium trochiforme, Sowb. Conch. Icon., f. 132, . 140
96. Cerithium aduncum, Gould. Ibid., f. 57, . . . 139
97. Cerithium dorsuosum, A. Ad. (= aduncum). Ibid., f. 56, b, ... 139
98. Cerithium flammiculatum, Sowb. Thes. Conch., f. 206, 139

FIGURE. PAGE.
99. Cerithium ferrugineum, Say. Am. Conch., t. 49, f. 3, . 140
100. Cerithium ferrugineum (= versicolor). Thes. Conch., f. 177, ... 140
1. Cerithium Eriense, Val. (= ferrugineum). Ibid., f. 119, 140
2. Cerithium variable, Ads. (= versicolor). Conch. Icon., f. 91, ... 140
3. Cerithium ferrugineum, Rve.(= variabile). Ibid., f. 92, 140
4. Cerithium Bermudæ, Sowb. (= versicolor). Ibid., f. 86b, 140
5. Cerithium lutosum, Menke. (= versicolor). Ibid., f. 113, 140
6. Cerithium Rissoide, Sowb. Ibid., f. 107, . . . 140
7. Cerithium mutabile, Ads. Ibid., f. 111, ... 141
8. Cerithium pingue, A. Ad. Thes. Conch., f. 217, . . 141
9. Cerithium contractum, Sowb. (= pingue). Conch. Icon., f. 120, ... 141
10. Cerithium pygmæa, A. Ad. Zool. Proc., t. 19, fig. 19, 1867, 142
11. Cerithium tæniatum, Sowb. (= pingue). Conch. Icon., f. 119, ... 141
12. Cerithium cylindraceum, Pease. Specimen. . . . 141
13. Cerithium costiferum, A. Ad. Thes. Conch., f. 220, . 142
14. Cerithium macrostoma, Hinds. Thes. Conch., f. 219, . 142
15. Cerithium pupæforme, A. Ad. Thes. Conch., f. 221, . 142
16. Cerithium Brazieri, Tryon. Specimen. 142
17. Cerithium insignis, Jeffreys. Zool. Proc., t. 6, f. 1, 1885, 144

PLATE 27.

17a. Cerithium crassilabrum, Krauss. Conch. Icon., f. 98, . 141
18. Cerithidea clathrata, A. Ad. Thes. Conch., f. 258, . . 165
19. Cerithium serotinum, A. Ad. Ibid., f. 102, . . . 141
20. Cerithium rhodostoma, A. Ad. Ibid., f. 103, . . . 141
21. Cerithium monachus, Crosse. Jour. de Conch., t. 3, f. 17, 1865, ... 143
22. Cerithium incisum, Sowb. Thes. Conch., f. 152, . . 142
23. Cerithium curtum, Sowb. Ibid., f. 153, ... 142
24. Cerithium sculptum, Sowb. Conch. Icon. Lampania, f. 9a, 143
25. Cerithium Gallapaginis, A. Ad. Thes. Conch., f. 156, . 143
26. Cerithium baeticum, Pease. Specimen. 143
27, 28. Cerithium lineatum, Dunker. Specimen. . . . 143
29, 30. Cerithium lacteum, Kiener. Thes. Conch., f. 213, 214, 143
31. Cerithium piperitum, Sowb. Conch. Icon., f. 81b, . . 144
31. Cerithium nitidum, Hombr. et Jacq. Voy. Astrol. et Zel., t. 24, f. 31, ... 143
32. Cerithium alveolus, Hombr. et Jacq. Voy. Astrol. et Zel., t. 24, f. 28, ... 144
33. Cerithium papillosum, Sowb. (= lacteum). Thes. Conch., f. 215, ... 144
35. Cerithium maculosum, Martyn. Thes. Conch., f. 29, . 145
36. Cerithium Sowerbyi, Kiener. Ibid., f. 33, . . . 145
37. Cerithium Cumingii, A. Ad. (= Sowerbyi). Ibid., f. 19, 145

FIGURE. PAGE.

38. Cerithium aluco, Linn. Ibid., f. 34, ... 145
39. Cerithium obeliscus, Brug. Conch. Icon. Vert., f. 7, . 146
40. Cerithium cedonulli, Sowb. (= obeliscus). Ibid., f. 1a, . 146
41. Cerithium semigranosum, Lam. Kiener, Coq. Viv., t. 21, f. 2, ... 146
42. Cerithium pulcher, A. Ad. Conch. Icon. Vert., f. 20, . 146
43. Cerithium tenuisculptum, Sowb. (= gemmatum). Ibid., f. 22b, ... 146

Plate 28.

44. Cerithium gemmatum, Hinds. Conch. Icon. Vert., f. 5, . 146
45. Cerithium articulatum, Ads. and Reeve. Ibid., f. 16b, . 146
46. Cerithium seminudum, Sowb. Ibid., f. 24a, . . . 146
47. Cerithium recurvum, Sowb. Ibid., f. 23, . . . 147
48. Cerithium Kochii, Phil. Thes. Conch., f. 15, . . . 147
49. Cerithium Kochii, Phil. Conch. Icon. Vert., f. 26b, . 147
50. Cerithium torulosum, Linn. Specimen. 147
51. Cerithium graniferum, Pease. Conch. Icon. Vert., f. 11, 147
52, 53. Cerithium torulosum, Linn. Conch. Icon. Vert., f. 25a, b, ... 147
54. Cerithium graniferum, Reeve. (= ravidum). Ibid., f. 6, 147
55. Cerithium turritum, Sowb. Conch. Icon. Cerith., f. 88, . 147
56. Cerithium Pfeifferi, Dunker. (= turritum). Ind. Moll. Maris Japan, t. 4, f. 12, ... 147
57. Cerithium attenuatum, Phil. Conch. Icon. Vert., f. 12, . 148
58. Cerithium Matukense, Watson. Voy. Challenger, xv, t. 40, f. 2, ... 148
59. Cerithium phoxum, Watson. Ibid. xv, t. 40, f. 3c, . . 148
60. Cerithium nobilis, Reeve. Thes. Conch., f. 28, . . 148
61. Cerithium bituberculatum, Sowb. Conch. Icon. Vert., f. 17b, ... 148
62. Cerithium asper, Linn. Ibid., f. 21, ... 148
63. Cerithium lineatum, Lam. (= asper). Ibid., f. 15b, . 148
64. Cerithium fasciatum, Brug. Thes. Conch., f. 6, . . 149

Plate 29.

65, 66. Cerithium fasciatum, Brug. Thes. Conch., f. 7, 8, . 149
67. Cerithium Martinianum, Pfr. (= fasciatum). Conch. Icon. Vert., f. 14b, ... 149
68. Cerithium Pharos, Hinds. Ibid., f. 13, ... 149
69. Cerithium vertagus, Linn. Thes. Conch., f. 3, . . 149
70. Cerithium taeniatum, Quoy. (= vertagus). Voy. Astrol., t. 54, f. 21, ... 149
71. Cerithium læve, Quoy. Thes. Conch., f. 270, . . . 149
72. Fastigiella carinata, Reeve. Zool. Proc., 15, 1848, . . 149
73. Bittium gemmatum, Watson. Voy. Challenger, t. 39, f. 2b, ... 150

FIGURE. PAGE.

74. Bittium Algerianum, Sowb. (= lacteum). Conch. Icon. Cerith., f. 145, ... 150
75. Bittium Watsoni, Jeffr. (= gemmatum). Zool. Proc., t. 6, f. 6, 1885, ... 150
76. Bittium lutea, B. D. D. (= lacteum). Moll. Roussil., t. 26, f. 3, ... 150
77. Bittium quadriseriata, B. D. D. (= lacteum). Ibid., t. 26, f. 6, ... 150
78. Bittium reticulatum, DaCosta. Conch. Icon., f. 134, . 150
79. Bittium reticulatum, DaCosta. Forbes & Hanley, Brit. Moll., t. ii, f. 2, ... 150
80. Bittium reticulatum, Var. Latreillei, Payr. Moll. Roussil., t. 25, f. 10, ... 151
81. Bittium reticulatum, var. paludosa, B. D. D. Ibid., t. 25, f. 14, ... 151
82. Bittium reticulatum, var. Jadertanum, Brusina. Ibid., t. 25, f. 20, ... 151
83. Bittium reticulatum, var. exigua, Monts. Ibid., t. 25, f. 26, 151
84. Bittium pusillum, Jeffr. (= submamillatum). Ann. Mag. N. H. xvii, t. 2, f. 11, 1856, ... 157
85. Bittium Watsoni, Jeffr. (= gemmatum). Zool. Proc., t. 6, f. 6a, 1885, ... 150
86. Bittium gibberulum, Ads. (= varium). Conch. Icon., f. 123, ... 152
87. Bittium columellare, Orb. (= pallidum). Sagra's Cuba, t. 23, f. 13, ... 152
88. Bittium Sayi, Menke. (= nigrum). Conch. Icon., f. 110, 152
89. Bittium iota, Ads. (= nigrum). Ibid., f. 124, . . 152
90. Bittium filosum, Gould. Moll. Wilkes Exped., f. 175, . 152
91. Bittium quadrifilatum, Carp. Specimen. . . . 153
92. Bittium Georgianum, Pfr. Nat. Hist. Mus. Hamburg, t. 2, f. 7, 1886, ... 154

PLATE 30.

93. Bittium amblyterum, Watson. Voy. Challenger, xv, t. 39, f. 6, ... 151
94. Bittium insculptum, Sowb. (= Lawleyanum). Conch. Icon., f. 128, ... 155
95. Bittium gracile, Jeffr. (= amblyterum). Zool. Proc., t. 6, f. 3, 1885, ... 151
96. Bittium arctum, Hombr. et Jacq. Voy. Astrol. et Zel., t. 24, f. 37, ... 155
97. Bittium abruptum, Watson. Voy. Challenger, xv, t. 41, f. 4, ... 151
98. Bittium granarium, Kiener. Coq. Viv., t. 19, f. 3, . . 155
99. Bittium mamillanum, Watson. Voy. Challenger, xv, t. 40, f. 6, ... 151

FIGURE. PAGE.

100. Bittium lacertinum, Gould. Conch. Icon., f. 129, . . 155
1. Bittium enode, Watson. Voy. Challenger, xv, t. 39, f. 3, 152
2. Bittium luscinæ, Watson. (= pigrum). Ibid. xv, t. 41, f. 1, ... 153
3. Bittium philomelæ, Watson. (= pigrum). Ibid. xv, t. 41, f. 2, ... 153
4. Bittium pigrum, Watson. Ibid. xv, t. 40, f. 7, . . 153
5. Bittium Lawleyanum, Crosse. Jour. de Conch., t. 1, f. 4, 1863, ... 154
6. Bittium delicatum, Watson. Voy. Challenger, xv, t. 41, f. 5, ... 154
7. Bittium rugatum, Carp. (= asperum). Conch. Icon., f. 140, ... 153
8. Bittium attenuatum, Carp. Specimen. 153
9. Bittium tricarinatum, Pease. Conch. Icon., f. 127, . 154
10. Bittium alutaceum, Gould. Ibid., f. 142, . . . 154
11. Bittium ædonicum, Watson. (= pigrum). Voy. Challenger, xv, t. 41, f. 6, ... 153
12. Bittium Oosimense, Watson. Ibid., t. 39, f. 1, . . . 156
13. Bittium turritelliformis, Angas. Zool. Proc., t. 26, f. 14, 1877, ... 154
14. Bittium diplax, Watson. Voy. Challenger, xv, t. 38, f. 4, 156
15. Bittium Amboynense, Watson. Ibid. xv, t. 40, f. 5, . 156
16. Bittium esuriens, Carp. Specimen. 153
17. Bittium pusillum, Dunker. (= perpusillum). Moll. Japan, t. 2, f. 6, ... 154
18. Bittium cylindricum, Watson. Voy. Challenger, xv, t. 39, f. 5, ... 156
19. Bittium glariosum, Gould. Conch. Icon., f. 131, . . 155
20. Bittium parcum, Gould. Ibid., f. 125, ... 155
21. Bittium Peruvianum, Orb. Voy. Amer., t. 77, f. 9, . 153
22. Bittium pupiforme, Watson. Voy. Challenger, xv, t. 41, f. 3, ... 156
23. Bittium plumbeum, Sowb. Thes. Conch., f. 293, . . 155
24. Bittium xanthum, Watson. Voy. Challenger, xv, t. 38, f, 6, 157

PLATE 31.

25. Bittium pusillum, Gould. Moll. Wilkes' Exped., f. 172, . 155
26. Bittium altum, Sowb. Conch. Icon., f. 126, . . . 156
27. Bittium furvum, Watson. Voy. Challenger, xv, t. 38, f. 5, 157
28. Bittium porcellanum, Watson. Ibid. xv, t. 38, f. 8, . 157
29. Bittium perparvulum, Watson. Ibid. xv, t. 38, f. 3, . 157
30. Bittium leucocephalum, Watson. Ibid. xv, t. 38, f. 7, . 157
31. Potamides ebeninus, Brug. Conch. Icon. Potamides, f. 2b, 158
32. Potamides Pacificus, Sowb. Ibid., f. 1a, ... 158
33. Potamides Lamarckii, Val. Kiener, Iconog., t. 27, f. 3, . 159
34. Potamides fuscatus, Linn. Conch. Icon. Tymp., f. 3, . 159
35. Potamides radula, Linn. Ibid., f. 4, ... 159

FIGURE. PAGE.
36. Potamides Owenii, Fer. (= radula). Ibid., f. 5, . . 159
37. Potamides multigranosus, Sowb. (= homologum). Ibid., f. 6, ... 159
38. Potamides fluviatilis, Pot. et Mich. Ibid., f. 9a, . . 159
39. Potamides micropterus, Kiener (= fluviatilis). Ibid., f. 7b, 160
40. Potamides retifera, A. Ad. (= fluviatilis). Ibid., f. 1, . 160

PLATE 32.

41. Potamides palustris, Linn. Sowb. Thes., f. 261, . . 160
42. Potamides. Operculum. Conch. Icon. Pyraz., f. 2b, . 160
43. Potamides Caledonicus, Jouss. Specimen. . . . 160
44. Potamides Caledonicus, Jouss. Bull. Soc. Zool. France, ix, t. 4, f. 12, ... 160
45. Potamides semisulcatus, Mörch. Kiener, Iconog., t. 27, f 1, 160
46. 47. Potamides sulcatus, Born. Conch. Icon. Pyraz., f. 1b, 160
48. Potamides Gourmeyi, Crosse. Ibid., f. 3, . . . 160
49. Potamides alatus, Phil. Ibid., f. 10, ... 160
50. Cerithidea pulchra, Ads. Conch. Icon. Cerithidea, f. 29, 161
51. Cerithidea incisa, Hombr. et Jacq. Voy. Astrol. et Zel. t. 23, f. 8, ... 160
52. Cerithidea euryptera, A. Ad. Conch. Icon. Tymp. f. 8, b. 160
53. Cerithidea Kieneri, Hombr. et Jacq. Ibid. Cerithidea, f. 6, ... 161
54. Cerithidea decollata, Linn, Ibid. f. 14, b. . . . 161
55. Cerithidea cornea, A. Ad. Ibid. f. 21, ... 162

PLATE 33.

56. Potamides telescopium, Linn. Thes. Conch. f. 269, . 161
57. Cerithidea Montagnei, Orb. Conch. Icon. Cerithidea, f. 26, ... 161
58. Cerithidea varicosa, Sowb. (= fortiusculum) Ibid. f. 19 a. 161
59. Cerithidea obtusa, Lam. Voy. Astrol. et Zel. t. 24, f. 3, 161
60. Cerithidea obtusa, Lam. Conch. Icon. Cerithidea, f. 40, 161
61. Cerithidea Kieneri, Hombr. et Jacq. Voy. Astrol. et Zel. t. 24, f. 4, ... 161
62. Cerithidea Quoyi, Hombr. et Jacq. Ibid. t. 23, f. 6, . 162
63. Cerithidea quadrata, Sowb. (= obtusa.) Conch. Icon. Cerithidea f. 5, ... 161
64. Cerithidea ornata, A. Ad. Ibid. f. 22, b. . . . 162
65, 66 Cerithidea Fortunei, A. Ad. Ibid. f. 15, a. b. . 162
67. Cerithidea rhizoporarum, A. Ad. Ibid. f. 13, a. . . 162
68. Cerithidea Mörchii, A. Ad. Ibid. f. 18, . . . 163
69. Cerithidea sacrata, Gould. Ibid. f. 7, ... 162
70. Cerithidea Mazatlanica, Carp. (= sacrata). Ibid. f. 8, . 162
71. Cerithidea pullata, Gld. (=sacrata). Pacific. R. R. Report, v, t. 11, f. 23, ... 162

FIGURE. PAGE.

72. Cerithidea albonodosa, Carp. (= sacrata). Conch. Icon. Cerithidea f. 1, b. 162
73. Cerithidea Rissoidea, Sowb. Ibid. f. 11, . . . 163
74. Cerithidea Hanleyi, Sowb. (=iostoma). Ibid. f. 16, . 164
75. Cerithidea Lafondii, Mich. (=scalariformis), Ibid. f. 2, 163
76. Cerithidea tenuis, Pfr. (=scalariformis). Ibid. f. 3, . 163
77. Cerithidea Lavalleana, Orb. Sagra's Cuba. t. 23, f. 16, . 164
78. Cerithidea scalariformis, Say. Specimen. . . . 163

PLATE 34.

79. Cerithidea iostoma, Pfr. Specimen. 164
80. Cerithidea costata, Da Costa. Conch. Icon. f. 10, . . 164
81. Cerithidea ambigua, C. B. Ad. (=costata). Ibid. f. 9, . 164
82. Cerithidea salmacida, Mor. (=costata). Ibid. f. 23, . 164
83. Cerithidea turrita, Stearns. Specimen. . 164
84. Cerithidea Bombayana, Sowb. (=Layardi). Reeve, Cerithidea. f. 24, ... 165
85. Cerithidea cinerascens, Pallas. (=conica). Thes. Conch. f. 254, ... 165
86, 87. Cerithidea Layardi, A. Ad. Conch. Icon. Tymp. f. 2, ... 165
88, 89. Cerithidea mamillata, Phil. (=conica). Ibid. Cerithidea. f. 25, ... 165
90. Cerithidea mamillata, Phil. (=conica). Kiener, Iconog. t. 22, f. 4, ... 165
91. Cerithidea conica, Blainv. Ibid. t. 23, f. 3, . . . 165
92. Cerithidea sardoum, Cantr. (=conica). Ibid. t. 22, f. 2, 165
93, 94. Cerithidea turritella, Quoy. Thes. Conch. f. 255, 256, ... 163
95. Cerithium pauxillum, A. Ad. Conch. Icon. Cerith. f. 144, ... 141
96. Cerithidea Charbonnieri, Petit. Ibid. Cerithidea. f. 12, a. 164
97. Cerithidea Sinensis, Phil. Ibid. f. 17, ... 164
98. Cerithidea Moreleti, Wattebl. (=Sinensis). Jour. de Conch. t. 4, f. 5, 1886, ... 165
99, 100. Cerithidea australis, Quoy. Conch. Icon. Lamp. f. 4, ... 166
1. Cerithidea Diemenensis, Quoy. Voy. Astrol. t. 55, f. 11, 166
2. Cerithidea undulatum, Sowb. Thes. Conch. f. 248, . 166
3, 4. Cerithidea zonale, Brug. Conch. Icon. Lamp. f. 5, . 167
5. Cerithidea atramentaria, A. Ad. Ibid. f. 6, . . . 167
6. Cerithidea Cumingii, Reeve. (=multiformis). Ibid. f. 2, ... 167
7. Cerithidea Cumingii, Crosse. Jour. de Conch. 3 ser. ii, t. 1, f. 10, ... 166
8. Cerithidea multiformis, Lischke. Jap. Meeresconch. ii, t. 5, f. 23, ... 167

FIGURE. PAGE.

9, 10, 11. Cerithidea septemstriata, Say. (=minimus). Conch. Icon. Lamp. f. 6, ... 167
12. Cerithium Eriense, Val. (=versicolor). Kiener, Iconog. t. 24, f. 1, ... 140

Plate 35.

13. Cerithidea multiformis, Lischke. Jap. Meeresconch. ii, t. 5, f. 24, ... 167
14. Cerithidea aterrima, Dunker. (=zonale). Ind. Moll. Maris Jap. t. 5, f. 8, ... 167
15. Cerithidea bicarinata, Gray. Conch. Icon. Cerithidea, f. 27, ... 163
16. Cerithidea subcarinata, Sowb. (= bicarinata). Ibid. f. 28, 163
17. Cerithidea augulifera, Sowb. Ibid. Lampan. f. 1, . 167
18. Cerithidea subviride, Sowb. Thes. Conch. f. 247, . . 166
19. Cerithidea corneum, Kiener. Kiener, Iconog. t. 32, f. 3, 168
20. Cerithiopsis tubercularis, Mtg. Thes. Conch. f. 222, . 168
21 Cerithiopsis columna, Carp. Specimen. . . . 171
22. Cerithiopsis tuberculoides, Carp. Specimen. . . 169
23. Cerithiopsis pulchella, Jeffreys. (= tubercularis). Ann. Mag. N. Hist. ii, t. 5, f. 8, 1858, ... 168
24. Cerithiopsis bilineata, Hœrnes. (= tubercularis, var.) Moll. Roussil. t. 27, f. 12, ... 168
25. Cerithiopsis Clarkii, Hanley. (= tubercularis). Sowb. Index, Brit. Shells. t. 15, f. 12, ... 168
26. Cerithiopsis neglecta, Weink. (= minimus). Thes. Conch. f. 235, ... 169
27. Cerithiopsis Barleei, Jeffreys. (= tubercularis, var.) Jour. Linn. Soc. xix, t. 4, f. 4, ... 168
28. Cerithiopsis atalaya, Watson. Ibid. t. 4, f. 9, . . 169
29. Cerithiopsis balteata, Watson. Voy. Challenger, xv, t. 30, f. 1, ... 173
30. Cerithiopsis tiara, Watson. (= diadema). Jour. Linn. Soc. xix, t. 4, f. 6, ... 169
31. Cerithiopsis diadema, Watson. Zool. Proc. t. 6, f. 8, 1885, ... 169
32. Cerithiopsis Fayalensis, Watson. (= diadema). Jour. Linn. Soc. xix, t. 4,. f. 5, ... 169
33. Cerithiopsis gemmulifera, Smith. Zool. Proc. t. 75, f. 22, 1871, ... 170
34. Cerithiopsis punctatum, Linn. Thes. Conch. f. 240, . 170
35. Cerithiopsis Emersonii, Ad. (= punctatum). Am. Mar. Conch. t. 8, f. 71, ... 170
36. Cerithiopsis Greenii, C. B. Ad. Ibid. f. 128, . . 170
37. Cerithiopsis flavum, C. B. Ad. Specimen. . . . 170
38. Cerithiopsis pulchellum, C. B. Ad. Thes. Conch. f. 239, . 171
39. Cerithiopsis Guaranianum. Orb. Voy. Amer. t. 77, f. 11, 171

FIGURE. PAGE.

40. Cerithiopsis Stejnegeri, Dall. Proc. Nat. Mus. vii, t. 2, f. 4, ... 171
41. Cerithiopsis Stejnegeri, var. truncatum, Dall. Ibid. t. 4, f. 5, 1886, ... 171
42. Cerithiopsis munita, Carp. Specimen. . . . 172
43. Cerithiopsis purpurea, Carp. Specimen. . . . 171

PLATE 36.

44. Cerithiopsis horrida, Jeffreys. Zool. Proc. t. 6, f. 9, 1885, ... 170
45. Cerithiopsis gracillima, Sowb. Conch. Icon. Cerith. f. 138, ... 172
46. Cerithiopsis Destrugesi, Folin. Les Meleagrin. t. 6, f. 12, ... 172
47. Cerithiopsis cælatum, Couth. Moll. Wilkes Exped. f. 174, ... 172
48. Cerithiopsis pulvis, Issel. Savigny, Egypt. t. 4, f. 5, . .172
49. Cerithiopsis clathrata, Angas. (= Angasi). Zool. Proc. t. 1, f. 12, 1871, ... 173
50, 51. Cerithiopsis gracile, Sowb. Thes. Conch. f. 223, 224, 173
52. Cerithiopsis metaxæ, Chiaje. Jeffreys' Brit. Conch. v, t. 81, f. 4, ... 173
53. Cerithiopsis Crosseanum, Tiberi. Jour. de Conch. xi, t. 6, f. 2, ... 173
54. Cerithiopsis convexa, Sowb. Specimen. . . . 172
55. Cerithiopsis Benoitianum Mts. Jour. de Conch. t. 13, f. 2, 1869, ... 173
56. Cerithiopsis terebellum, Ads. Thes. Conch. f. 241, . . 174
57. Cerithiopsis subreticulata, Dunker. Moll. Japon. t. 2, f. 10, ... 170
58. Cerithiopsis trilineatum, Phil. Thes. Conch. f. 242, . 174
59. Cerithiopsis assimulatum, Ad. Ibid. f. 246, . . . 174
60. Cerithiopsis carinaum, Smith. Zool. Proc. t. 75, f. 21, 1871, ... 175
61. Cerithiopsis Moreleti, Folin. Les Meleagrin. t. 6, f. 10, 174
62. Cerithiopsis Kanoni, Folin. Ibid. t. 6, f. 11, . . . 174
63. Cerithiopsis bacillum, Issel. Savigny, Egypt, t. 4, f. 28, 174
64. Cerithiopsis dextroversum, Ads. & Rve. Voy. Samarang, t. 11, f. 31, ... 175
65. Cerithiopsis cereum, Sowb. Thes. Conch. f. 244, . . 175
66. Cerithiopsis crocea, Angas. Zool. Proc. t. 1, f. 13, 1878, 175
67. Cerithiopsis purpurea, Angas. Ibid. t. 5, f. 7, 1877, . 175
68. Cerithiopsis metula, Lovén. Jeffreys, Brit. Conch. v, t. 80, f. 3, ... 175
69. Cerithiopsis obeliscoides, Jeffr. Zool. Proc. t. 6, f. 4, 1885, 175
70. Cerithiopsis cylindratum, Jeffreys. Ibid. t. 6, f. 5, 1885, 175
71. Cerithiopsis procerum, Jeffreys. Ibid. t. 6, f. 2, 1885, . 176
72. Cerithiopsis bizonalis, Jeffreys. Ibid. t. 6, f. 10, 1885, . 176

FIGURE. PAGE.

73. Cerithiopsis Whiteavesii, Verrill. Trans. Conn. Acad. v, t. 42, f. 7, ... 176
74. Cerithiopsis costulata, Moller. Jeffreys, Brit. Conch. v, t. 81, f. 5, ... 176
75. Cerithiopsis granosa, Wood. (Magnified). Sars, Moll. Norv. t. 13, f. 6, ... 177

PLATE 37.

76. Triforis regalis, Jouss. Bull. Soc. Mal. i, t. 4, f. 18, . 177
77. Triforis nodiferus, Ad. & Reeve. Voy. Samarang, t. 11, f. 37, ... 177
78. Triforis tibialis, Jouss. Bull. Soc. Mal. Fr. i, t. 4, f. 19, 178
79. Triforis gigas, Hinds. Voy. Sulphur, t. 8, f. 1, . . 178
80. Triforis concors, Hinds. Ibid. t. 8, f. 2, ... 178
81. Triforis dolicha, Watson. Voy. Challenger, xv, t. 42, f. 1, 178
82. Triforis sculptus, Hinds. Voy. Sulphur, t. 8, f. 3, . . 178
83. Triforis pyramidalis, Ads. & Rve. Voy. Samarang, t. 11, f. 36, ... 178
84. Triforis Reevei, Desh. Moll. Reunion, t. 11, f. 25, . . 178
85. Triforis acutus, Kiener. Kiener, Icon. t. 32, f. 2, . . 178
86. Triforis bilix, Hinds. Voy. Sulphur, t. 8, f. 5, . . 179
87. Triforis maxillaris, Hinds. Voy. Sulphur, t. 8, f. 7, . 179
88. Triforis micans, Hinds. Ibid. t. 8, f. 7, ... 179
89. Triforis alveolatus, Ads. & Reeve. Voy. Samarang, t. 11, f. 30, ... 179
90. Triforis Hindsi, Desh. Moll. Reunion, t. 11, f. 25, . 179
91. Triforis verrucosus, Ads. & Reeve. Voy. Samarang, t. 11, f. 32, ... 179
92. Triforis formosus, Desh. Moll. Reunion, t. 11, f. 29, . 179
93. Triforis Angasi, Crosse. Jour. de Conch. t. 1, f. 13, 1865, 179
94. Triforis marmoratus, Pease. Donum Bism. t. 2, f. 8, . 180
95. Triforis fusca, Dunker. Moll. Jap. t. 2, f. 22, . . 180
96. Triforis Isleanus, Velain. Arch. Zool. Expér. vi, t. 3, f. 10, ... 180
97, 97a. Triforis malvaceus, Jouss. Bull. Soc. Mal. Fr. i, t. 4, f. 2, 1, ... 180
98. Triforis Douvillei, Jouss. Ibid. i, t. 4, f. 3, . . . 180
99. Triforis Blainvillei, Jouss. Ibid. i, t. 4, f. 6, . . . 180
100. Triforis Mariei, Jouss. Ibid. i, t. 4, f. 7, . . . 180
1. Triforis bigemma, Watson. Voy. Challenger, xv, t. 43, f. 6, ... 180
2. Triforis Hebes, Watson. Ibid. xv, t. 43, f. 7, . . 181
3. Triforis inflata, Watson. Ibid. xv, t. 40, f. ' . . 181
4. Triforis decoratus, C. B. Ads. Specimen. . . 182

PLATE 38.

5. Triforis aspera, Jeffreys. Zool. Proc. t. 6, f. 7, 1865, . 181
6. Triforis asperrimus, Hinds. Voy. Sulphur, t. 8, f. 10, . 181

FIGURE. PAGE.

7. Triforis gemmulatus, Ads. & Reeve. Voy. Samarang, t. 11, f. 34, ... 181
8. Triforis angustissimus, Desh. Moll. Reunion, t. 12, f. 1, 182
9. Triforis Pfeifferi, Crosse. Jour. de Conch. t. 1, f. 14, 1865, 182
10. Triforis mirificus, Desh. Moll. Reunion, t. 11, f. 32, . 182
11. Triforis violaceus, Quoy. Voy. Astrol. t. 55, f. 22, . 182
12. Triforis Ducosensis, Jouss. (= violaceus). Bull. Soc. Mal. Fr. i, t. 4, f. 10, ... 182
13. Triforis ruber, Hinds. Voy. Sulphur, f. 15, . . . 182
14. Triforis roseus, Hinds. (= ruber). Ibid. t. 8, f. 19. . 182
15. Triforis distinctus, Desh. (= ruber). Moll. Reunion, t. 11, f. 30, ... 183
16. Triforis Adamsi, Desh. (= ruber). Ibid. t. 11, f. 23, . 183
17. Triforis vulpinus, Hinds. Voy. Sulphur, t. 8, f. 13, . 183
18. Triforis monilifer, Hinds. Ibid. t. 8, f. 14, . . . 183
19. Triforis granulatus, Ads. & Reeve. Voy. Samarang, t. 11, f. 33, ... 183
20. Triforis suturalis, Ads. & Reeve. Ibid. t. 11, f. 29, . 183
21. Triforis clemens, Hinds. Voy. Sulphur, t. 8, f. 16, . 183
22. Triforis Carteretensis, Hinds. Ibid. t. 8, f. 17, . . 184
23. Triforis concinnus, Hinds. Ibid. t. 8, f. 20, . . . 184
24. Triforis speciosus, Ads. & Reeve. Voy. Samarang, t. 11, t. 28, ... 183
25. Triforis acicula, Issel. Moll. Mar Rosso. t. 4, f. 3, . 183
26. Triforis pupaeformis, Desh. Moll. Reunion, t. 12, f. 3, . 184
27. Triforis obesula, Jouss. Bull. Soc. Mal. Fr. i, t. 4, f. 17, 185
28. Triforis perlatus, Issel. Savigny, Egypte, t. 4, f. 4, . 185
29. Triforis crenulatus, Desh. Moll. Reunion, t. 11, f. 21, . 184
30. Triforis hilaris, Hinds. Voy. Sulphur, t. 8, f. 18, . 190
31. Triforis Tasmanicus, Tenison-Woods. Specimen, . . 184
32. Triforis crassula, Marts. (= atomus). Mœbius' Mauritius, t. 22, f. 1, ... 184
33. Triforis atomus, Issel. Moll. Mar Rosso, t. 4, f. 4, . 184
34. Triforis Lervaini, Jouss. (= perlatus). Bull. Soc. Mal. Fr. i, t. 4, f. 11, ... 185
35. Triforis Chaperi, Jouss. Ibid. i, t. 4, f. 4, . . . 185
36. Triforis xystica, Jouss. Ibid. i, t. 4, f. 8, . . . 185

PLATE 39.

37. Triforis Levukense, Watson. Voy. Challenger, xv, t. 39, f. 4, ... 186
38. Triforis limosa, Jouss. Bull. Soc. Mal. Fr. i, t. 4, f. 16, . 186
39. Triforis Rossiteri, Jouss. Ibid. i, t. 4, f. 9, . . . 185
40. Triforis Ægle, Jouss. Ibid. i, t. 4, f. 12, . . . 185
41. Triforis rufula, Watson. Voy. Challenger, xv, t. 42, f. 2, 186
42. Triforis tristoma, Blainv. Malacol. t. 20, f. 3, . . 187
43. Triforis cinguliferus, Pease. Don. Bism. t. 2, f. 8, . . 186
44. Triforis perversus, Linn. Kiener, Icon. t. 25, f. 1, . . 187

FIGURE. PAGE.
45. Triforis exilis, Dunker. Moll. Japon. t. 2, f. 9, . . 187
46. Triforis ornatus, Desh. Kiener, Icon. t. 25, f. 2, . . 188
47. Triforis cnodax, Jouss. Bull. Soc. Mal. Fr. t. 4. f. 14, . 185
48. Triforis funebris, Jouss. Ibid. i, t. 4, f. 15, . . . 186
49. Triforis tricolor, Jouss. Ibid. i, t. 4, f, 13, . . . 186
50. Triforis cucullatus Folin, (= alternatus). Meleagrin. t. 6, f. 13, ... 186
51. Triforis adversa, Mtg. (= perversus). Forbes & Hanley, Brit. Moll. t. 91, f. 6, ... 187
52. Triforis nigrocinctus, Ads. Specimen, ... 188
53. Triforis turris-Thomæ, Chemn. Specimen, . . . 188
54. Triforis turris-Thomæ, (= intermedius). Moll. Cuba. t. 23, f. 11, ... 188
55. Triforis vitrens, Hinds. Voy. Sulphur, t. 8, f. 12, . . 188
56. Triforis Bayani, Jouss. Bull. Soc. Mal. Fr. i, t. 4, f. 20, 189
57. Triforis vittatus, Hinds. Voy. Sulphur, t. 8, f. 4, . . 189
58. Triforis dextroversus, Ads. & Reeve. Voy. Samarang, t. 11, f. 31, ... 190
59. Triforis corrugatus, Hinds. Voy. Sulphur, t. 8, f. 7, . 189
60. Triforis connatum, Montr. Jour. de Conch. 3 Ser. ii, t. 9, f. 4, ... 189
61. Triforis cingulata, Dunker, (= Dunkeri). Moll. Japon, t. 2, f. 1, ... 189
62. Triforis elegans, Hinds. Voy. Sulphur, t. 8, f. 11, . 189
63. Triforis hilaris Hinds. Ibid. t. 8, f. 18, ... 190
64. Triforis cancellatus. Hinds. Ibid. t. 8, f. 6, . . . 189
65. Triforis triliratus, Desh. Moll. Reunion, t. 11, f. 27, . 190

LITTORINIDÆ.

Plate 40.

66. Littorina irrorata, Say. Dentition. Troschel, Gebiss. i, t. 10, f. 15, ... 229
67. Risella imbricata, Gray. Dentition. Ibid. i, t. 11, f. 8, . 232
68. Lacuna vincta, Mtg. Dentition. Ibid. i, t. 10, f. 13, . 233
69. Planaxis sulcatus, Born. Dentition. Ibid. i, t. 12, f. 7, . 237
70. Litiopa melanostoma, Rang. Dentition. Ibid. i, t. 11, f. 14, ... 237
71. Modulus lenticularis, Chemn. Dentition. Ibid. i, t. 11, f. 15, ... 232
72. Fossarus Adansonii, Phil. Dentition. Fischer's Man. de Conch. f. 481, ... 235
73. Aquilonaria Turneri, Dall. Dentition. Proc. Nat. Mus. t. 3, f. 2, 1886, ... 230
74. Littorina obtusata, Linn. Meyer & Möbius, Kieler bucht, f. 6, ... 229
75. Littorina obtusata. Operculum. Fischer's, Man. de Conch, f. 477, ... 229

FIGURE. PAGE.

76, 77. Lacuna pallidula, Meyer & Möbius, Kieler bucht, f. 10, 12, ... 233
78. Purpurina Bellona, d'Orb. Fischer's, Man. de. Conch. f. 480, ... 232
79. Litiopa melanostoma, Rang. Ibid. f. 492, ... 237

PLATE 41.

80. Littorina grandis, Midd. Conch. Icon. f. 16b. . . 240
81. Littorina squalida, Brod. & Sowb. Zool. Beechey's Voy. t. 34, f. 12, ... 240
82–85. Littorina littorea, Linn. Conch. Icon. f. 18, . . 240
86. Littorina Mandschurica, Schrenck. Reise Amurl. t. 14, f. 17, ... 241
87. Littorina Sitchana, Phil. Küster, Conch. Cab. t. 10, f. 11, ... 240
88. Littorina Sitchana, Phil. Conch. Icon. f. 49, a. . . 240
89. Littorina brevicula, Phil. Ibid. f. 51, b. . . . 241
90. Littorina Souverbiana, Crosse. Jour. de Conch. 3d. Ser. ii, t. 1, f. 6, ... 241
91. Littorina Aleutica, Dall (= brevicula, var.). Proc. Calif. Acad. iv, t. 1, f. 3, a. 241
92, 93. Littorina rudis, Donovan. Forbes and Hanley, Brit. Moll. t. 83, f. 4, 6, ... 241
94. Littorina Grœnlandica, Mke. (= rudis). Conch. Icon. f. 52, ... 241
95. Littorina nigrolineata, Gray (= rudis, var.). Forbes & Hanley, Brit. Moll. t. 83, f. 1, ... 241
96. Littorina simplex, Rve. (= rudis). Conch. Icon. f. 63, b. 241
97. Littorina saxatilis, Johnston (= rudis, var.). Forbes and Hanley, Brit. Moll. t. 86, f. 4, ... 241
98, 99, 100. Littorina patula, Thorpe (= rudis, var.). Ibid. t. 85, f. 7, 8; t. GG. f. 2, ... 241
1–4. Littorina tenebrosa, Mtg. (= rudis, var.). Ibid. t. 84, f. 12; t. 85, f. 2, 4, 5, ... 241
5. Littorina obtusata, Linn. (= littoralis). Mal. Rossica, t. 8, f. 2, ... 241
6. Littorina arctica, Moll. (= littoralis). Küster, Conch. Cab. t. 2, f. 14, ... 241
7. Littoriana arctica, Moll. (= littoralis). Conch. Icon. f. 69, ... 241
8. Littorina palliata, Say. (=littoralis). Ibid. f. 31, b. . 242
9. Littorina ventricosa, Phil. Küster, Conch. Cab. t. 10, f. 14, ... 242
10. Littorina porcata, Phil. Conch. Icon. f. 89, . . . 242

PLALE 42.

11. Littorina ahenea, Reeve. (= scabra). Conch. Icon. f. 15, b, ... 243

FIGURE. PAGE.

12–14. Littorina scabra, Linn. Orb. Moll. Cuba, t. 15, f. 10, 15, 17, ... 243
15. Littorina augulifera, var. strigata, Phil. Abbild. ii, t. 5, f. 14, ... 243
16. Littorina augulifera, var. rubra, Phil. Ibid, ii, t. 5, f. 12, ... 243
17. Littorina aurea, Bonnet (= scabra, var.). Guerin's Mag. t. 22, f. 4, 1864, ... 243
18, 19. Littorina scabra, Linn. Conch. Icon. f. 15, a. 21, b. 253
20. Littorina scabra, var. punctata, Phil. Abbild. ii, t. 5, f. 4, ... 243
21. Littorina intermedia, Phil. (= scabra, var.). Küster, Conch, Cab. t. 4, f. 17, ... 244
22. Littorina intermedia, Phil. (= scabra, var.). Conch. Icon. f. 101, ... 244
23. Littorina Sinensis, Phil. (= scabra, var.). Küster, Conch. Cab. t. 11, f. 9, ... 244
24. Littorina Newcombii, Rve. (=scabra, var.) Conch. Icon. f. 28, a. 244
25. Littorina arboricola, Rve. Ibid, f. 27, ... 244
26. Littorina Sieboldi, Phil. (= scabra, var.). Conch. Icon. f. 26, ... 244
27. Littorina Philippiana, Rve. (= scabra, var.). Ibid. f. 22, b. 244
28. Littorina carinifera, Menke (= scabra, var.). Ibid. f. 29, b. 244
29. Littorina cingulata, Phil. (=scabra, var.). Ibid. f. 25, . 244
30. Littorina pallescens, Phil. (=scabra, var.). Ibid. f. 43, . 244

PLATE 43.

31, 31a. Littorina filosa, Sowb. Conch. Icon. f. 24, b. c. . . 244
32. Littorina aberrans, Phil. Ibid, f. 59, ... 245
33. Littorina strigata, Lischke. Japan. Meeresconch. ii, t. 5, f. 22, ... 245
34. Littorina flammea, Phil. Conch. Icon. f. 46, . . . 245
35. Littorina Fortunei, Rve. (=flammea). Ibid, f. 42, . 245
36. Littorina luteola, Quoy (=flammea). Voy. Astrol. t. 33, f. 4, ... 245
37. Littorina columellaris, Orb. Conch. Icon. f. 97, . . 245
38. Littorina nebulosa, Lam. (=scabra, var.) Ibid, f. 55, . 244
39, 40. Littorina undulata, Gray. Ibid, f. 67, d. b. . . 244
41. Littorina conica, Phil. (=undulata). Ibid, f. 36, b. . 244
42. Littorina melanostoma, Gray. Ibid, f. 45, a. . . 245
43. Littorina melanostoma, var. articulata, Nevill. Ibid, f. 45, b. 245
44. Littorina varia. Sowb. Genera, Littorina, f. 4, . . 246
45. Littorina fasciata, Gray (=varia.). Conch. Icon. f. 103, b. 246

FIGURE. PAGE.

46. Littorina variegata, Soul. (=varia). Voy. Bonite, t. 31, f. 40, ... 246
47. Littorina pulchra, Sowb. Conch. Icon. f. 17, a. . . 246
48. Littorina irrorata, Say. Küster, Conch. Cab. t. 10, f, 7, . 246
49. Littorina Sayi, Rve. (=irrorata). Conch. Icon. f. 96, b. 246
50. Littorina exarata, Phil. (=irrorata). Küster, Conch. Cab. t. 7, f. 16, ... 246
51. Littorina flava, Brod. (=columellaris). Ibid, t. 10, f. 3, 246
52. Littorina sulculosa, Phil. Reeve, Conch. Icon. f. 39. . 247
53. Littorina obesa, Sowb. Ibid, f. 41, ... 247
54. Littorina rufa, Recl. (Enlarged.) Ibid, f. 87, . . 247
55. Littorina planaxis, Nuttall. Ibid. f. 38, . . . 248
56. Littorina ambigua, Rve. (=planaxis). Ibid, f. 64, . 248

PLATE 44.

57. Littorina picta, Phil. (= planaxis). Conch. Icon. f. 81, 248
58. Littorina striata, King. Ibid, f. 40, ... 247
59. Littorina globosa, Dunker (= striata). Kuster, Conch. Cab. t. 11, f. 4, . . , ... 247
60. Littorina punctata, Gmel. Conch. Icon. f. 66, . . 248
61. Littorina guttata, Reeve. Ibid, f. 76, ... 248
62, 63. Littorina Fraseri, Reeve. (= punctata, Gmel.) Ibid, f. 60, 47, ... 248
64. Littorina pulchella, Dunker. Küster, Conch. Cab. t. 10, f. 1, ... 248
65. Littorina Knysnaensis, Krauss. Conch. Icon. f. 75, . 249
66. Littorina Africana, Krauss. Küster, Conch. Cab. t. 4, f. 6, ... 248
67. Littorina decollata, Krauss. Conch. Icon. f. 92, . . 249
68. Littorina picea, Reeve (= Knysnaensis). Ibid. f. 83, . 249
69. Littorina leucosticta, Phil. Küster, Conch. Cab. t. 8, f. 1, 249
70. Littorina luctuosa, Reeve (= Mauritiana). Conch. Icon. f. 65, ... 247
71. Littorina mauritiana, Lam. Ibid, f. 100, . . . 247
72. Littorina lævis, Reeve. (= Mauritiana). Ibid, f. 95, . 247
73. Littorina Diemenensis, Quoy. (= Mauritiana). Ibid, f. 94, ... 247
74. Littorina cincta, Quoy. (= Mauritiana). Ibid, f. 53, . 247
75. Littorina Africana, Reeve. (= Mauritiana). Ibid, f. 37a. 247
76. Littorina Nova-Zelandiæ, Reeve. Ibid, f. 74, . . . 249
77. Littorina melanacme, Smith. Jour. Linn. Soc. xii, t. 30, f. 21, ... 249
78. Littorina zebra, Wood (= Peruviana). Conch. Icon. f. 61a. 249
79. Littorina Cubana, Weink. (= columellaris). Küster, Conch. Cab. t. 9, f. 3, ... 246
80. Littorina modesta, Mke. (= conspesa). Conch. Icon. f. 107, ... 249

FIGURE. PAGE.

81. Littorina albida, Phil. (= conspersa). Küster, Conch. Cab. t. 11, f. 1, ... 249
82. Littorina conspersa, Phil. Ibid. t. 8, f. 11, ... 249
83. Littorina puncticulata, Phil. (= conspersa). Ibid. t. 8, f. 9, ... 249
84. Littorina Philippii, Carp. Specimen. 249
85. Littorina penicillata, Carp. Ibid, ... 250
86. Littorina pintado, Wood. Conch. Icon, f. 54, b. . . 250

PLATE 45.

87. Littorina irrorata, Reeve (= aspera). Phil. Conch. Icon. f. 56a. 249
88. Littorina tenebrata, Nuttall (= pintado). Ibid, f. 58, . 250
89. Littorina tessellata, Phil. Ibid, f. 48b. 250
90, 91. Littorina Paytensis, Phil. Küster, Conch. Cab. t. 9, f. 1, 4, ... 250
92. Littorina glabrata, Phil. (= ziczac). Conch. Icon. f. 104, 251
95. Littorina Araucana, Orb. (= Paytensis). Ibid, f. 88, . 250
96. Littorina Araucana, Orb. (= Paytensis). Voy. Amer. Merid. t. 53, f. 9, ... 250
97. Littorina cingulifera, Dunker. Küster, Conch. Cab. t. 8, f. 12, ... 250
98. Littorina scutulata, Gould. Moll. Wilkes Exped. f. 24, 250
99, 100. Littorina scutulata, Gould. Specimens, . . . 250
1. Littorina plena, Gld. (= scutulata). Moll. Wilkes Exped. f. 236, ... 250
2. Littorina lepida, Gld. (= scutulata). Ibid. f. 238, . 250
3. Littorina pullata, Carp. (= scutulata). Specimen, . 250
4. Littorina radiata, Souleyet (= granularis). Moll. Voy. Bonite. f. 47, ... 260
5. Littorina ziczac, Chemn. Conch. Icon. f. 57, b. . . 251
6. Littorina carinata, d'Orb. (= ziczac). Ibid, f. 50, . . 251
7. Littorina debilis, Phil. (= ziczac). Ibid, f. 70, . . 251
8. Littorina pusilla, Phil. Küster, Conch. Cab. t. 1, f. 22, 251
9. Littorina columna, Jonas. Ibid, t. 10, f. 13, . . . 251
10. Littorina guttata, Phil. (= meleagris). Specimen, . 248
11. Littorina minima, Gray. Conch. Icon. f. 86, . . . 252
12. Littorina brevicula, Phil. Abbild. ii, t. 3, f. 20, . . 241
13. Littorina neritoides, Linn. Forbes & Hanley, Brit. Moll. t. 84, f. 1, ... 252
14, 15. Littorina Cubana, Weink. Küster, Conch. Cab. t. 9, f. 3. 2, ... 246
16. Littorina mespilum, Mühlf. Ibid. t. 2, f. 17, . . . 252
17. Littorina naticoides, Orb. Moll. Cuba, t. 15, f. 22, . 252

PLATE 46.

18. Littorina Thersites, Reeve. Conch. Icon. f. 78, . . 252
19. Littorina acuminata, Gld. Moll. Wilkes Exped. f. 239, 252

FIGURE. PAGE.

20, 21. Littorina littoralis, Forbes (= obtusata, Linn). Conch. Icon. f. 34, ... 252
22. Littorina fabalis, Turton (= obtusata, Var.). Ibid. f. 90b. 253
23. Littornia æstuarii, Jeffreys (= obtusata, Var.). Brit. Conch. v, t. 101, f. 8, ... 253
24. Littorina umbilicata, d'Orb. Voy. Amer. Merid. t. 76, f. 3, ... 253
25, 26. Littorina albicans, Metcalfe. Conch. Icon., f. 44a, b, 253
27. Littorina tenuis, Phil. Ibid, f. 35, ... 254
28. Littorina Ardouiniana, Heude. Hist. Nat. Emp. Chin., Pt. 3, t. 25, f. 8, ... 253
29. Littorina caliginosa, Gld. Moll. Wilkes' Exped., f. 240, 254
30. Littorina venusta, Pfeffer. Nat. Hist. Mus. Hamburg, t. 1, f. 9, 1886, ... 254
31. Littorina granum, Pffr. Ibid, t. 1, f. 10, . . . 254
32. Littorina pygmæa, Pffr. Ibid, t. 1, f. 11, . . . 254
33. Littorina umbilicata, Pffr. Ibid, t. 1, f. 12, . . . 254
34. Littorina pumilio, Smith. Trans. Roy. Soc. clxviii, t. 9, f. 7, ... 267
35. Littorina Hisseyana, Tenison Woods. Specimen, . . 255
36. Littorina Paludinella, Reeve. Conch. Icon, f. 84, . . 255
37. Littorina setosa, Smith. Trans. Roy. Soc. clxviii, t. 9, f. 6, 255
38. Littorina setosa, Smith. Nat. Hist. Mus. Hamburg, t. 1, f. 7, 1886, ... 255
39–41. Littorina pellita, Marts. Ibid, t. 1, f. 6, . . . 255
42. Littorina Turneri, Dall. Proc. Nat. Mus., t. 3, f. 3, 1886, 255
43. Cremnoconchus carinatus, Layard. Conch. Indica, t. 146, f. 10, ... 256
44. Cremnoconchus conicus, Blanf. Ibid, t. 146, f. 9, . . 256
45. Cremnoconchus Fairbanki, Blanf. (= conicus). Ibid, t. 146, f. 7, ... 256
46. Cremnoconchus canaliculatus, Blanf. (= conicus). Jour. Bengal, xxxix, t. 3, f. 4, ... 256
47. Cremnoconchus Syhadrensis, Blanf. Conch. Ind., t. 146, f. 6, ... 256

PLATE 47.

48. Tectarius pagodus, Linn. Conch. Icon., f. 4, . . . 256
49–51. Tectarius bullatus, Martyn. Ibid, f. 1, . . . 257
52. Tectarius tectum-persicum, Linn. Ibid, f. 3, . . . 257
53. Tectarius coronaria, Lam. Ibid, f. 2, ... 257
54. Tectarius armata, Issel. Issel. Mar Rosso, t. 2, f. 7, . 257
55. Tectarius tectiformis, Watson. Voy. Challenger, xv, t. 43, f. 1, ... 258
56, 57. Tectarius Montrouzieri, Fischer. Küster, Conch. Cab., t. 14, f. 14, 15, ... 259
58. Tectarius spinulosa, Phil. (= bullatus). Conch. Icon., f. 5, 257

FIGURE. PAGE.

59. Tectarius thiarella, Anton (= nodulosus). Küster, Conch. Cab., t. 5, f. 9, ... 258
60. Tectarius dilatatus, Orb. (= nodulosus). Conch. Icon., f. 9, ... 258
61. Tectarius trochoides, Gray (= nodulosus). Ibid, f. 105, 258
62. Tectarius monilifera, Soul. (= nodulosus). Voy. Bonite, t. 31, f. 38, ... 258
63. Tectarius Malaccana, Phil. (= nodulosus). Conch. Icon., f. 7, ... 258
64. Tectarius vilis, Menke (= nodulosus). Ibid., f. 12, . 258
65. Tectarius subnodosus, Phil. (= nodosus). Ibid., f. 10, . 259
66. Tectarius nodosus, Gray. Ibid., f. 13, ... 259
67. Tectarius Natalensis, Krauss (= nodosus). Ibid., f. 102, 259

PLATE 48.

68. Tectarius muricatus, Linn. Conch. Icon., f. 11, . . 258
69. Tectarius glans, Reeve (= miliaris, var.). Ibid, f. 62a, 259
70. Tectarius rugosus, Menke. Ibid, f. 32b, . . . 259
71. Tectarius reticulatus, Anton (= miliaris). Küster, Conch. Cab., t. 8, f. 13, ... 259
72. Tectarius pyramidalis, Quoy. Conch. Icon., f. 14, . . 258
73. Tectarius Cumingii, Phil. Küster, Conch. Cab., t. 12, f. 9, 257
74. Tectarius tuberculatus, Gray (= nodulosus). Sagra's Cuba, t. 14, f. 21, ... 258
75. Tectarius nodulosus, Gmel. Küster, Conch. Cab., t. 14, f. 2, 258
76. Tectarius Feejeensis, Reeve (= miliaris). Conch. Icon., f. 82, ... 259
77. Tectarius granosus, Phil. (= miliaris, Var.). Ibid, f. 106, 259
78. Tectarius miliaris, Quoy. Voy. Astrolabe, t. 33, f. 16, . 259
79, 80. Tectarius subgranosus, Dunker (= granularis). Voy. Novara, t. 1, f. 10, ... 260
81. Tectarius cinereus, Pease (= granularis). Am. Jour. Conch. v, t. 8, f. 14, ... 260
82. Tectarius granocostatus, Reeve (= miliaris). Conch. Icon., f. 79, ... 259
83. Tectarius nodosus, Gray. Ibid, f. 13, ... 259
84. Tectarius granularis, Gray. Ibid, f. 68b, . . . 260
85. Tectarius millegrana, Phil. (= granularis). Ibid., f. 99, . 260
86. Tectarius lemniscata, Phil. (= nodosus). Ibid., f. 6, . 259
87. Modulus cidaris, Reeve (= tectum). Reeve, Elem. Conch. i, t. 13, f. 63, ... 260
88. Modulus candidus, Petit (= tectum). Jour. de Conch. iv, t. 5, f. 11, ... 260
89. Modulus obtusatus, Phil. (= tectum). Specimen, . . 260
90. Modulus Floridanus, Conr. Am. Jour. Conch. v, t. 12, f. 6, 260
91, 92. Modulus lenticularis, Chemn. Specimen, . . . 261
93, 94. Modulus disculus, Phil. Küster, Conch. Cab., t. 36, f. 14, 261

Plate 49.

FIGURE. PAGE.

95. Modulus dorsuosus, Gld. Mex. & Cal. Shells, t. 14, f. 12, 261
96, 97. Modulus cerodes, A. Ad. Specimen, . . . 261
98. Modulus catenulatus, Phil. (= unidens). Küster, Trochus, t. 18, f. 4, ... 261
99. Risalla nana, Lam. Küster, Risella, t. 1, f. 13, . . 262
100. Modulus trochiformis, Soul. (= unidens). Voy. Bonite, t. 37, f. 25, ... 261
1, 2. Modulus Moreleti, Fischer. Jour. de Conch., t. 7, f. 2, 1882, ... 261
3. Risella lutea, Quoy. Specimen, ... 262
4, 5. Risella cicatricosa, Jonas. Abbild. i, Trochus, t. 2, f. 2, 262
6. Risella aurata, Quoy. Kiener, Trochus, t. 34, f. 2, . 262
7. Risella Kielmanseggi, Zelebor. Voy. Novara, t. 1, f. 11d, 262
8, 9. Risella imbricata, Gray. Küster, Risella, t. 1, f. 4, 5, 262
10, 11. Risella plana, Quoy. Ibid., t. 1, f. 6, 7, . . . 262
12. Risella plana, Quoy. Jour. de Conch., 3 ser. iv, t. 11, f. 2, 262
13. Risella nana, Lam. Specimen, ... 262
14. Risella nana, Lam. Voy. Astrol., t. 62, f. 5, . . . 262
15. Risella Bruni, Crosse. Jour. de Conch., 3 ser. iv, t. 11, f. 3, 262
16, 17. Risella picta, Phil. Küster, Risella, t. 1, f. 11, 12, . 262
18, 19. Risella grisea, Phil. Ibid, t. 1, f. 19, 20, . . . 262
20, 21. Risella melanostoma, Gmel. Jour. de Conch., 3 ser. iv, t. 11, f. 1, ... 262
22, 23. Risella flavescens, Phil. Küster, Risella, t. 1, f. 17, 18, 262
24, 25. Risella plicatula, Phil. Ibid, t. 1, f. 23, 24, . . 262
26, 27. Risella fimbriata, Phil. Ibid, t. 1, f. 9, 10, . . 262
28, 29. Risella vittata, Phil. Ibib, t. 1, f. 25, 26, . . 262

Plate 50.

30, 31. Risella livida, Phil. Küster, Conch. Cab., t. 1, f. 27, 28, 262
32, 33. Risella tantilla, Gould. Moll. Wilkes' Exped., f. 215, 263
34. Risella diminutivus, Rve. (= tantilla). Conch. Icon. Trochus, f. 57, ... 263
35–37. Risella Gaidei, Montrouz. Jour. de Conch., t. 3, f. 3, 1879, ... 263
38. Risella conoidalis, Pease. Am. Jour. Conch. iii, t. 24, f. 8, 263
39, 40. Risella Isseli, Semper. Savigny's Egypt, t. 5, f. 35, . 263
41, 42. Risella infracostata, Issel. Ibid, t. 5, f. 40, . . 264
43. Risella Roepstorffiana, Nevill. Specimen, . . . 264
44–46. Plesiotrochus Souverbianus, Fischer. Jour. de Conch., t. 3, f. 4, 1879, ... 264
47, 48. Limnotrochus Thomsoni, Smith. Zool. Proc., t. 33, f. 17, 1881, ... 264
49, 50. Limnotrochus Kirki, Smith. Ibid, t. 33, f. 18, 1881, 264
51, 52. Lacuna puteolus, Turton. Forbes & Hanley, Brit. Moll., t. 72, f. 9; t. 74, f. 9, ... 265

FIGURE. PAGE.
53, 53a. Lacuna pallidula, DaCosta. Ibid, t. 72, f. 2, 4, . 265
53b. Lacuna Thorpeana, Phil. Küster, Lacuna, t. 6, f. 14, . 265
54. Lacuna neritoidea, Gould. Invert. Mass., f. 574, . . 265
55. Lacuna porrecta, Carp. Specimen, ... 265
56. Lacuna effusa, Carp. (= porrecta, Var.). Specimen, . 266
57. Lacuna exæquata, Carp. (= porrecta, Var.). Specimen, 266
58. Lacuna variegata, Carp. Specimen, ... 266
59, 60. Lacuna Bourguignati, Rochebr. Nouv. Arch. Mus. 2 ser. iv, t. 18, f. 12, ... 266
61, 62. Lacuna labiosa, Lovén (= divaricata). Forbes & Hanley, Brit. Moll., t. 86, f. 7, 8, ... 266
63, 74. Lacuna unifasciata, Carp. Specimen, . . . 267
64. Lacuna fusca, Binney (= divaricata). Küster, Lacuna, t. 6, f. 4, ... 266
65. Lacuna gracilior, Metc. Forbes & Hanley, Brit. Moll., t. 74, f. 7, ... 266
66. Lacuna quadrifasciata, Mtg. Ibid, t. 86, f. 6, . . 266
67, 68. Lacuna vincta, Mtg. (= divaricata). Ibid, t. 72, f. 11, 12, ... 266
69. Lacuna solidula, Lovén. Küster, Lacuna, t. 6, f. 3, . 266
70. Lacuna frigida, Lovén. Ibid, t. 6, f. 6, ... 266
71, 72. Lacuna carinata, Gld. (= divaricata). Moll. Wilkes' Exped., f. 231a, ... 266
73. Lacuna arctica, Phil. (= divaricata). Küster, Lacuna, t. 6, f. 5, ... 266
75. Lacuna borealis, Phil. (= divaricata). Ibid, t. 6, f. 2, . 266
76. Lacuna crassior, Mtg. Forbes & Hanley, Brit. Moll., t. 72, f. 6, ... 267
77. Lacuna laxata, A. Ad. Jour. de Conch., t. 4, f. 7, 1868, . 268

Plate 51.

78. Lacuna parvula, Velain. Archives Zool. Expér. vi, t. 3, f. 11, ... 270
79. Lacuna Heberti, Velain. Ibid, t. 6, f. 13, . . . 270
80. Lacuna reflexa, Dall. Proc. Nat. Mus. vii, t. 2, f. 1, 1884, 267
81, 82. Lacuna Antarctica, Martens. Nat. Hist. Mus. Hamburg, t. 2, f. 1, 1885, ... 267
83. Lacuna depressa, Seguenza. Zool. Proc., t. 4, f. 8, 1885, . 267
84. Lacuna tenella, Jeffreys. Jeffreys' Brit. Conch. v, t. 101, f. 7, ... 268
85. Lacuna margaritifera, Watson. Moll. Voy. Challenger, t. 43, f. 3, ... 268
86. Lacuna Adamsi, Jeffreys. Zool. Proc., t. 20, f. 16, 1883, 268
87. Lacuna carinata, Jeffreys. Ibid, t. 20, f. 9, 1883, . . 269
88, 89. Lacuna cincta, Jeffreys. Ibid, t. 20, f. 8, 1883, . 269
90, 91. Lacuna naticiformis, Jeffreys. Zool. Proc., t. 20, f. 11, 1883, ... 269

FIGURE. PAGE.

92. Lacuna olivacea, Verrill. Trans. Conn. Acad. vi, t. 29, f. 5, 269
93. Lacuna cingulata, Verrill. Ibid, vi, t. 32, f. 7, . . 269
94. Fossarus costatus, Brocchi. Moll. Roussillon, t. 27, f. 19, 272
95. Fossarus Stoliczkanus, Nevill. Jour. Bengal, xl, t. 1, f. 10, 272
96. Fossarus elegans, Verrill & Smith. Trans. Conn. Acad. v, t. 57, f. 28, ... 271
97. Fossarus mediocris, Folin. Meleagrinicoles, t. 5, f. 8, . 271
98. Fossarus reticulatus, Wood. Zool. Proc., t. 4, f. 9, 1885, 272
99, 100. Fossarus sulcatus, S. Wood. Crag Moll., t. 8, f. 23, 272
1. Fossarus insignis, Nevill. Jour. As. Soc. Beng. xl, t. 1, f. 9, ... 273
2. Fossarus cereus, Watson. Moll. Voy. Challenger, t. 43, f. 4, ... 274
2a. Fossarina patula, Ad. & Angas. Zool. Proc., t. 37, f. 9, 276

PLATE 52.

3–5. Fossarus ambiguus, Linn. Küster, Fossar, t. 1, f. 11, 4, 5, ... 271
6. Fossarus sulcatus, Orb. (= Orbignyi, Fischer). Moll. Cuba, t. 17, f. 28, ... 271
7. Fossarus lamellosus, Montr. Jour. de Conch., 3d ser. i, t. 11, f. 3, ... 271
8. Fossarus pusillus, Gould. Specimen. 272
9. Risella Caledonica, Crosse. Jour. de Conch., t. 6, f. 6, 1875, ... 263
10. Fossarus atratus, C. B. Ad. Specimen, ... 272
11. Fossarus fenestratus, Carp. Specimen, ... 272
12. Fossarus obtusa, Carp. Specimen, ... 273
13. Fossarus reticulatus, A. Ad. Zool. Proc., t. 20, f. 13, 1853, 273
14. Fossarus tuberatus, Jeffreys. Ibid, t. 20, f. 12, 1853, . 274
15. Fossarus tuberculatus, Watson. Voy. Challenger, xv, t. 46, f. 5, ... 275
16. Fossarina picta, A. Ad. Zool. Proc., t. 19, f. 26, 1867, . 275
17. Fossarina Brazieri, Angas. Ibid, t. 1, f. 24, 1877, . . 275
18, 19. Fossarina funiculata, Woods. Proc. Roy. Soc. Viet. xvii, f. 6, 7, ... 275
20, 21. Fossarina Petterdi, Brazier. Jour. de Conch., t. 12, f. 1, 1871, ... 275
22, 23. Planaxis sulcatus, Born. Conch. Icon., f. 4, . . 276
24. Planaxis breviculus, Desh. Thes. Conch., t. 483, f. 3, . 277
25. Planaxis Savignyi, Desh. Ibid, f. 4, ... 277
26. Planaxis Savignyi, Desh. Conch. Icon., f. 30b, . . 277
27. Planaxis encausticus, Smith. Thes. Conch., f. 32, . . 277
28. Planaxis crassispira, Smith. Ibid, f. 14, . . . 277
29. Planaxis Nicobaricus, Zelebor (= mollis). Moll. Voy. Novara, t. 2, f. 1, ... 279
30. Planaxis planicostatus, Sowb. Conch. Icon., f. 26, . . 277
31. Planaxis obscurus, A. Ad. (= sulcatus). Ibid, f. 5, . 276

FIGURE. PAGE.

32. Planaxis brevis, Quoy (= sulcatus). Voy. Astrol., t. 33, f. 30, ... 276
33. Planaxis suturalis, Smith. Conch. Icon., f. 18, . . 277
34, 35. Planaxis mollis, Sowb. Ibid, f. 35, ... 279
36. Planaxis nucleus, Lam. Ibid, f. 7, ... 277
37. Planaxis nigra, Quoy. Ibid, f. 13, ... 278
38. Planaxis ater, Pease (= lineatus). Ibid, f. 18, . . 278
39. Planaxis Hanleyi, Smith (= nigra). Ibid, f. 12, . . 278
40. Planaxis abbreviatus, Pease. Ibid, f. 19, . . . 277
41. Planaxis labiosus, A. Ad. (= lineatus, Var.). Ibid, f. 14a, 279
42. Planaxis acutus, Krauss. Ibid, f. 9, ... 278
43. Planaxis castaneus, Smith (= nigritella). Ibid, f. 2, . 278
44. Planaxis similis, Smith. Ibid, f. 11, ... 278
45. Planaxis atropurpureus, Recluz (= nigra). Ibid, f. 10, 278
46. Planaxis Albersi, Dunker (= nigra). Ind. Moll. Guin., t. 2, f. 35, ... 278
47. Planaxis nigritella, Forbes. Reeve, Conch. Icon., f. 8, . 278
48. Planaxis cingulatus, A. Ad. (= lineatus). Ibid, f. 15, . 278

Plate 53.

49. Planaxis virgatus, Smith (= lineatus). Reeve, Conch. Icon., f. 24, ... 279
50, 51. Planaxis variabilis, Smith (= lineatus). Ibid, f. 23, 278
52. Planaxis ineptus, Gld. (= lineatus). Ibid, f. 28, . . 278
53. Planaxis zonatus, A. Ad. (= lineatus). Ibid, f. 29, . 279
54. Planaxis Hermannseni, Dkr. Ind. Moll. Guinea, t. 2, f. 33, 279
55. Planaxis longispira, Smith (= lineatus). Conch. Icon., f. 32, ... 279
56. Planaxis striatula, Phil. (= lineatus, Var.). Donum Bismark., t. 2, f. 11, ... 279
57. Planaxis lineolatus, Gld. (= lineatus). Conch. Icon., f. 31, 278
58. Planaxis tenuis, Smith. Ibid, f. 27, ... 279
59. Planaxis strigatus, Hanley (= lineatus). Ibid, f. 25, . 279
60, 61. Planaxis punctostriatus, Smith. Ibid, f. 34, . . 279
62. Planaxis piligerus, Phil. Conch. Icon., f. 38, . . . 280
63. Planaxis lineatus, DaCosta. Conch. Icon., f. 20, . . 279
64. Planaxis eboreus, Smith (= lineatus). Conch. Icon., f 33, 278
65. Planaxis succinctus, A. Ad. (= lineatus). Ibid, f. 21, . 278
66. Planaxis fasciatus, Pease (= lineatus). Am. Jour. Conch. iv, t. 12, f. 17, ... 278
67, 68. Planaxis Hidalgoi, Crosse. Jour. de Conch., t. 8, f. 7, 1886, ... 279
69. Planaxis setigerus, A. Ad. (= piligerus). Zool. Proc., t. 20, f. 5, 1853, ... 280
70. Planaxis Michaui, Crosse & Fischer (= decollatus). Conch. Icon. Planaxis, f. 36, ... 280
71. Planaxis decollatus, Quoy. Ibid, f. 37, ... 280

FIGURE. PAGE.

72. Litiopa striata, Pfr. (= melanostoma). Moll. Voy. Bonite, t. 37, f. 1, ... 281
73. Litiopa nitidula, Pfr. (= melanostoma). Ind. Moll. Guin., t. 2, f. 22, ... 281
74. Litiopa bombyx, Rang. (= melanostoma). Adams' Genera, t. 3, 4, f. 5, ... 281
75. Litiopa Grateloupiana, Drouet (= melanostoma). Moll. Acores, f. 1, ... 281
76. Litiopa Savignyi, Issel. Savigny's Egypte, t. 3, f. 19, . 281
77. Litiopa Jeffreysiana, Issel. Mar Rosso, t. 5, f. 4, . . 281
78. Litiopa decussata, Gould (= melanostoma). Moll. Wilkes' Exped., f. 252, ... 281
79. Litiopa Bellangeri, Soul. Voy. Bonite., t. 37, f. 7, . . 281
80. Litiopa striata, Watson. Voy. Challenger, xv, t. 42, f. 6, 284
81. Litiopa semistriata, Phil. Savigny's Egypte, t. 3, f. 27, . 282
82. Litiopa Martensi, Issel. Ibid, t. 3, f. 26, . . . 282
83. Litiopa lauta, A. Ad. Specimen. 282
84. Litiopa phasianella, Angas. Zool. Proc., t. 13, f. 18, 1867, 283
85. Litiopa suturalis, A. Ad. Thes. Conch., t. 172, f. 32, . 283
86. Litiopa Leithi, Smith. Zool. Proc., p. 537, 1875, . . 283
87. Litiopa marmorea, Carp. Specimen. 283
88. Litiopa albugo, Watson. Voy. Challenger, xv, t. 42, f. 3, 283
89. Litiopa limnaeiformis, Watson. Ibid, xv, t. 41, f. 7, . 283
90. Litiopa fulva, Watson. Ibid, xv, t. 42, f. 5, . . . 284
91. Litiopa sulcata, Watson. Ibid, xv, t. 42, f. 7, . . . 284
92. Litiopa goniocheila, A. Ad. Ibid, xv, t. 42, f. 4, . . 284

RISSOIDÆ.

Plate 54.

93, 94. Operculum of Rissoina Inca, d'Orb. Küster, Conch. Cab., t. 5, f. 4, ... 320
95. Operculum of Rissoa violacea. Fischer's Manuel, f. 494, 314
96, 97. Operculum of Jeffreysia diaphana. Forbes & Hanley, Brit. Moll., t, JJ, f. 1, ... 322
98. Rissoa parva. Dentition. Troschel, Gebiss. i, t. 10, f. 6, 315
99. Skenea planorbis. Dentition. Ibid, i, t. 10, f. 10, . . 323
100. Skenea planorbis. Forbes & Hanley, Brit. Moll. t. GG. f. 1, ... 323
1. Jeffreysia opalina. Dentition. Troschel, Gebiss. i, t. 10, f. 12, ... 323
2. Jeffreysia opalina. Jaw. Ibid, i, t. 10, f. 11, . . 322
3. Homalogyra nitidissima. Fischer's Manuel, f. 487, . 324
4. Homalogyra nitidissima. Dentition. Sars, Moll. Arct. Norv. 324
5. Choristes elegans, Carp. Dentition. Trans. Conn. Acad. v, t. 58, f. 27, a. 324

FIGURE. PAGE.

6. Rissoina terebroides, E. A. Smith. Jour. Linn. Soc. xii, t. 30, f. 19, ... 373
7. Rissoina multicostata, Schw. (= Krebsii). Schwartz, Rissoina, t. 6, f. 48, ... 371
8. Rissoina scalarina, A. Ad. (= plicata, Ad.) Conch. Icon. f. 6, ... 375
9. Rissoina obeliscus, Recluz. Schwartz, Rissoina, t. 2, f. 15, ... 376
10. Rissoina lirata, Angas. Zool. Proc. t. 40, f. 11, 1880, . 373
11. Rissoina scalariformis, Watson. Voy. Challenger, t. 46, f. 6. 378
12. Rissoina triangularis, Watson. Ibid, t. 46, f. 7, . . 373
13. Rissoina Honolulensis, Watson. Ibid, t. 46, f. 9, . . 373
14. Rissoina mercurialis, Watson. Ibid, t. 46, f. 8, . . 378

Plate 55.

15. Rissoina Inca, d'Orb, Küster's Conch. Cab. t. 5, f. 2, . 369
16. Rissoina pyramidalis, A. Ad. Ibid, t. 7, f. 1, . . . 369
17. Rissoina fasciata, A. Ad. Schwartz, Rissoina, t. 1, f. 3, . 370
18. Rissoina Smithii, Angas. (= fasciata). Conch. Icon. f. 68, ... 370
19. Rissoina Bruguierei, Payr. Schwartz, Rissoina, t. 1, f. 4, 370
20. Rissoina crassa, Angas (= Rissoi). Zool. Proc. t. 1, f. 16, 1871, ... 378
21. Rissoina Hanleyi, Schwartz. Rissoina, t. 4, f. 28, . . 370
22. Rissoina striolata, Risso. (= Bruguierei). Ibid, t. 1, f. 5, 370
23. Rissoina monilis, A. Ad. Ibid, t. 1, f. 7, . . . 371
24. Rissoina nivea, A. Ad. Conch. Icon. f. 91, . . . 379
25. Rissoina fortis, C. B. Ad. Ibid, f. 30, ... 371
26. Rissoina striata, Menke. Ibid, f. 87, ... 371
27. Rissoina pusilla, Schw. (= ambigua). Schwartz, Rissoina, t. 4, f. 29, ... 371
28. Rissoina micans, A. Ad. Ibid, t. 1, f. 8, . . . 371
29. Rissoina myosoroides, Recluz. (= ambigua). Ibid, t. 4, f. 30, ... 371
30. Rissoina conifera, Schwartz. Schwartz, Rissoina, t. 4, f. 3, 370
31. Rissoina ambigua, Gould. Ibid, t. 3, f. 27, . . . 371
32. Rissoina costulata, Pease. Reeve's Conch. Icon. f. 121, . 372
33. Rissoina terebra, Garrett. (= incerta). Proc. Philad. Acad. t. 2, f. 11, 1873, ... 372
34. Rissoina incerta, Souverb. Conch. Icon. f. 46, . . 372
35. Rissoina subconcinna, Souverb. Ibid, f. 85, . . . 371
36. Rissoina subdebilis, Nevill. Küster's Conch. Cab. t. 15b. f. 9, ... 376
37, 38. Rissoina Nevilliana, Weink. Ibid, t. 15, a. f. 7; t. 15d. f. 2, ... 372
39. Rissoina Gertrudæ, Tenison-Woods. Specimen. . . 372

FIGURE. PAGE.

40. Rissoina spiralis, Souverb. Küster's Conch. Cab. t. 14, f. 11, ... 373
41. Rissoina costatogranosa, Garrett. Proc. Philad. Acad. t. 2, f. 7, 1873, ... 373
42. Rissoina gracilis, Garrett. Ibid. t. 2, f. 8, 1873, . . 373

Plate 56.

43–46. Rissoina variegata, Angas. Conch. Icon. f. 64, . 370
47. Rissoina millecostata, Garrett. Proc. Philad. Acad. t. 2, f. 3, 1873, ... 387
48. Rissoina debilis, Garrett. Ibid, t. 2, f. 9, 1873, . . 372
49. Rissoina Duclosi, Montr. Küster, Conch. Cab. t. 14, f. 9, 378
50. Rissoina angulata, Jickeli. Jahrb. Mal. Gesell. xi, t. 6, f. 7, ... 375
51. Rissoina elegantissima, d'Orb. Schwartz, Rissoina, t. 2, f. 12, ... 374
52. Rissoina dubiosa, C. B. Ad. Ibid, t. 4, f. 3, . . . 374
53. Rissoina Burdigalensis, d'Orb. Ibid, t. 2, f. 13, . . 375
54. Rissoina subvillica, Weink. Küster, Conch. Cab. t. 15d. f. 14, ... 374
55. Rissoina canaliculata, Sowb. Conch. Icon. f. 60, . . 376
56. Rissoina distans, Anton. Schwartz, Rissoina, t. 2, f. 17, 375
57. Rissoina costata, A. Ad. Ibid, t. 2, f. 16, . . . 376
58. Rissoina plicata, A. Ad. Ibid, t. 3, f. 21, . . . 375
59. Rissoina denticulata, Mohrenst. Küster, Conch. Cab. t. 3, f. 23, ... 375
60. Rissoina subangulata, Schwartz. Rissoina, t. 3, f. 20, . 375
61. Rissoina Weinkauffiana, Nevill. Küster, Conch. Cab. t. 15b. f. 7, ... 376
62. Rissoina plicatula, Gould. Ibid, t. 15b. f. 5, . . . 377
63. Rissoina turricula, Pease. Ibid, t. 15c. f. 6, . . . 377
64. Rissoina subfuniculata, Nevill. Ibid, t. 15b. f. 8, . . 377
65. Rissoina minuta, Nevill. Ibid, t. 15, f. 12, . . . 376
66. Rissoina scolopax, Souverb. Kuster, Conch. Cab. t. 15, f. 1, ... 377
67. Rissoina bryerea, Mtg. Conch. Icon. f. 8, . . . 379
68. Rissoina scalariformis, Schwartz. Rissoina, t. 3, f. 24, . 375
69. Rissoina funiculata, Souverb. Küster, Conch. Cab. t. 14, f. 12, ... 377
70. Rissoina pseudobryerea, Nevill. Ibid, t. 15d. f. 1, . . 379
71. Rissoina scalaroides, Sowb. Conch. Icon. f. 1, . . 379
72. Rissoina Woodwardi, Carp. Ibid, f. 104, . . . 372
73. Rissoina Chesnelli, Mich. Ibid, f. 89, ... 380
74. Rissoina Catesbyana, d'Orb. Ibid, f. 94, . . . 380
75. Rissoina Baxteriana, Nevill. Küster, Conch. Cab. t. 15d. f. 7, ... 376
76. Rissoina triticea, Pease. Conch. Icon. f. 102, . . 380

Plate 57.

FIGURE. PAGE.

77. Rissoina exigua, Dunker. Küster, Conch. Cab. t. 15c. f. 3, ... 380
78. Rissoina Rissoi, Audouin. Ibid, t. 15, f. 13, . . . 378
79. Rissoina clathrata, A. Ad. Conch. Icon. f. 76. . . 381
80. Rissoina bicollaris, Schwartz. Küster, Conch. Cab. t. 10, f. 5, ... 381
81. Rissoina fenestrata, Schwartz. Rissoina, t. 7, f. 51, . 381
82. Rissoina pulchra, C. B. Ad. Küster, Conch. Cab. t. 10, f. 7, ... 381
83. Rissoina pulchra, C. B. Ad. Schwartz, Rissoina, t. 7, f. 52, a. 381
84. Rissoina cancellata, Phil. Ibid, t. 7, f. 52, . . . 381
85. Rissoina nitida, A. Ad. Conch. Icon. f. 53, . . . 383
86. Rissoina Sagraiana, d'Orb. Ibid, f. 80, ... 384
87. Rissoina Deshayesii, Schwartz. Rissoina, t. 7, f. 55, . 382
88. Rissoina labrosa, Schwartz. Ibid, t. 7, f. 58, . . . 382
89. Rissoina media, Schwartz. Ibid, t. 7, f. 56, . . . 382
90. Rissoina costulata, Dunker. Ind. Moll. Jap. t. 2, f. 11, . 374
91. Rissoina cœlata, A. Ad. Conch. Icon. f. 14, . . . 386
92. Rissoina Erythræa, Schwartz. Rissoina, t. 8, f. 59,. . 384
93. Rissoina bellula, A. Ad. Ibid, t. 8, f. 60, . . . 383
94. Rissoina nodicincta, A. Ad. Conch. Icon. f. 72, . . 383
95. Rissoina Philippiana, Pfr. (= cancellata). Ibid, f. 103, 381
96. Rissoina exasperata, Souverb. Küster, Conch. Cab. t. 14, f. 10, ... 384
97, 98. Rissoina Seguenziana, Issel. Ibid, t. 15, f. 16; t. 15c. f. 2, ... 383
99. Rissoina Samoensis, Dunker. Ibid, t. 15c. f. 1, . . 384
100, 1. Rissoina strigillata, Gould. Ibid, t 15, b. f. 14, . 383
2. Rissoina Hungerfordiana, Nevill. Ibid, t. 15, a. f. 9, . 383

Plate 58.

3. Rissoina Blanfordi, Nevill. Küster, Conch. Cab. t. 15, d. f. 6, ... 383
4. Rissoina Jickeli, Weinkauff. Ibid. t. 15, c. f. 4, . 383
5. Rissoina sculptilis, Garrett. Proc. Philad. Acad. t. 2, f. 2, 1873, ... 383
6. Rissoina scabra, Garrett. Ibid, t. 2, f. 6, 1873, . . 384
7. Rissoina hystrix, Souverb. Küster, Conch. Cab. t. 15, f. 3, ... 383
8. Rissoina horrida, Garrett. Proc. Philad. Acad. t. 2, f. 5, 1873, ... 383
9. Rissoina Privati, Folin. Fonds de la Mer. i, t. 1, f. 8, . 382
10. Rissoina transenna, Watson. Voy. Challenger, t. 46, f. 10, ... 382
11. Rissoina Curtisii, E. A. Smith. Zool. Alert, t. 5, f. M. . 384

FIGURE. PAGE.

12. Rissoina granulosa, Pease. Küster, Conch. Cab. t. 14, f. 13, ... 383
13. Rissoina elegantula, Angas. Zool. Proc. t. 40, f. 10, 1880, ... 386
14. Rissoina reticulata, Sowb. Conch. Icon. f. 75, . . 385
15. Rissoina decussata, Mtg. Ibid, f. 78, ... 385
16. Rissoina princeps, C. B. Ad. (=reticulata). Ibid, f. 95, 385
17. Rissoina striato-costata, d'Orb. Ibid, f. 88, . . . 385
18. Rissoina concinna, A. Ad. Küster, Conch. Cab. t. 10, f. 3, ... 386
19. Rissoina concinna, Sowb. (=pseudoconcinna, Nev.) Conch. Icon. f. 9, ... 391
20. Rissoina Adamsiana, Weink. Küster, Conch. Cab. t. 15, a. f. 4, ... 386
21. Rissoina Andamanica, Weink. Ibid, t. 15, b. f. 6, . . 386
22. Rissoina dimidiata, Jickeli. Jahrb. Mal. Gessell. xi, t. 6, f. 4, ... 386
23. Rissoina Mohrensterni, Desh. Conch. Icon. f. 57, . . 386
24. Rissoina tenuistriata, Pease. Am. Jour. Conch. iii, t. 24, f. 30, ... 386
25. Rissoina gigantea, Desh. Schwartz, Rissoina, t. 8, f. 62, ... 387
26. Rissoina Antoni, Schwartz. Ibid, t. 8, f. 63, . . . 388
27. Rissoina deformis, Sowb. (=spirata). Ibid, t. 8, f. 65, . 388
28. Rissoina d'Orbigny, A. Ad. (=spirata). Conch. Icon. f. 7, ... 388
29. Rissoina spirata, Sowb. Ibid, f. 17, ... 388

PLATE 59.

30. Rissoina striolata, A. Ad. (=spirata). Conch. Icon. f. 65, ... 388
31. Rissoina supracostata, Garrett. Proc. Philad. Acad. t. 2, f. 1, 1873, ... 388
32. Rissoina Lamberti, Souverb. Küster, Conch. Cab. t. 14, f. 7, ... 388
33. Rissoina turrita, Garrett. Proc. Philad. Acad. t. 2, f. 12, 1873, ... 389
34. Rissoina albida, C. B. Ad. Conch. Icon. f. 92, . . 388
35. Rissoina deformis, Reeve (=spirata). Conch. Icon. f. 63, ... 388
36. Rissoina Japonica, Weink. (=spirata). Küster, Conch. Cab. t. 15, a. f. 1, ... 388
37. Rissoina Artensis, Montr. (=spirata). Conch. Icon. f. 84, ... 388
38. Rissoina percrassa, Nevill. Küster, Conch. Cab. t. 15, f. 10, ... 389
39. Rissoina semiglabra, A. Ad. Conch. Icon. f. 58, . . 389
40. Rissoina insignis, Ad. and Reeve. Ibid, f. 61, . . 389

FIGURE. PAGE.
41. Rissoina tridentata, Mich. Schwartz, Rissoina, t. 9, f. 74, ... 389
42. Rissoina bidentata, Phil. Ibid, t. 9, f. 75, . . . 389
43. Rissoina coronata, Recluz. Ibid, t. 10, f. 77, . . 389
44. Rissoina culimoides, A. Ad. Conch. Icon. f. 99, . . 389
45. Rissoina Browniana, d'Orb. Ibid, f. 101, . . . 390
46. Rissoina lævissima, C. B. Ad. Ibid, f. 93, . . . 390
47. Rissoina oryza, Garrett. Proc. Philad. Acad., t. 2, f. 4, 1873, ... 390
48. Rissoina lævigata, C. B. Ad. Schwartz, Rissoina, t. 10, f. 79, ... 390
49. Rissoina Sloaniana, d'Orb. Ibid, t. 10, f. 80, . . 390
50. Rissoina vitrea, C. B. Ad. Küster, Conch. Cab., t. 13, f. 7, ... 390
51. Rissoina Peasiana, Nevill. Ibid, t. 15, a. f. 6, . . 389
52. Rissoina subulina, Weink. Ibid, t. 15, a. f. 3, . . 390
53. Rissoina Stoppani, Weink. Ibid, t. 15, c. f. 5, . . 390
54. Rissoina semiplicata, Pease. Conch. Icon. f. 100, . . 389
55. Rissoina insolita, Desh. Ibid, f. 43, ... 391
56. Rissoina sublævigata, Nevill. Küster, Conch. Cab., t. 15, c. f. 7, ... 390
57, 58. Rissoina miranda, A. Ad. Ibid. t. 15, a. f. 8; t. 15, d. f. 3, ... 391
59. Rissoina Bellardii, Issel (=Miranda). Mar Rosso, t. 5, f. 9, ... 391
60. Rissoina mirabilis, Dunker. Küster, Conch. Cab. t. 15, a. f. 5, ... 391
61. Rissoina abnormis, Nevill. Ibid, t. 15, f. 9, . . . 391
62. Rossoina affinis, Garrett. Proc. Philad. Acad., t. 2, f. 10, 1873, ... 389

PLATE 60.

63. Fairbankia Bombayana, Blanf. Küster, Conch. Cab., t. 15, c. f. 8, ... 393
64. Iravadia trochlearis, Gould. Conch. Icon. f. 105, . 394
65. Iravadia trochlearis, var. minor. Küster, Rissoidæ, t. 2, f. 21, ... 394
66. Iravadia ornata, Blanf. Ibid, t. 15, b. f. 1, . . . 393
67. Rissoina Kerguelenensis, Smith. Ibid, t. 25, f. 16, . 391
68. Rissoina subrufescens, Smith. Küster, Conch. Cab., t. 25, f. 17, ... , 391
69. Rissoina caliginosa, Smith. Ibid, t. 25, f. 15, . . 392
70. Barleeia rubra, Ads. Ibid, t. 29, f. 21, . . . 392
71. Barleeia rubra, Ads. Conch. Icon., f. 54, . . . 392
72. Barleeia fulva, Mich. (=rubra). Ibid, f. 55, . . 392
73. Barleeia subtenuis, Carp. Specimen, ... 393
74. Barleeia haliotiphila, Carp. Specimen, . . . 393
75. Barleeia imbricta, Watson. Voy. Challenger, t. 43, f. 2, 393

FIGURE. PAGE.

76. Fenella pupoides, A. Ad. Jour. de Conch., t. 4, f. 5, 1868, 394
77. Fenella pupoidea, Carp. (=subpupoidea). Specimen, . 394
78. Fenella excurvata, Carp. Specimen, ... 395
79. Fenella virgata, Phil. Savigny's Egypte, t. 3, f. 29, . 394
80. Fenella cerithina, Phil. Ibid, t. 3, f. 23, . . . 395
81. Fenella reticulata, A. Ad. Trans. Roy. Soc., clxviii, t. 51, f. 6, ... 395
82. Fenella elongata, Watson. Voy. Challenger. t. 34, f. 4, 395
83. Fenella infratincta, Garrett. Proc. Philad. Acad., t. 2, f. 22, 1873, ... 395
84. Fenella semicostata, Pease. Am. Jour. Conch., iii, t. 24, f. 22, ... 395
85. Putilla lucida, A. Ad. Zool. Proc., t. 19, f. 25, 1867, . 396
86. Jeffreysia bifasciata, Carp. Specimen, ... 396
87. Jeffreysia Alderi, Carp. Specimen, ... 396
88. Jeffreysia diaphana, Alder. (=glabra). Sowb. Index. Brit. Shells, t. 14, f. 13, ... 396
89. Jeffreysia opalina, Jeffreys. Ibid, t. 14, f. 14, . . 396
90. Jeffreysia globularis, Jeffreys. Brit. Conch., v, t. 69, f. 7, 397
91. Jeffreysia cylindrica, Jeffreys. Ann. Mag. N. Hist., xiii, t. 2, f. 18, 1856, ... 397
92. Jeffreysia Edwardiensis, Watson. Voy. Challenger, t. 43, f. 5, ... 397
93. Jeffreysia Sancta Pauli, Vélain. Archives Zool. Exper., vi, t. 3, f. 20, ... 397
94. Tatea Huonensis, Woods. Specimen. 397
95. Dardania olivacea. Hutton. Specimen. . . . 397
96, 97. Skenella Georgiana, Pfeffer. Nat. Hist. Mus. Hamberg, t. 2, f. 6, a. b. 1885, ... 396
98, 99. Skenea subcanaliculata, Smith. Trans. Roy. Soc. clxviii, t. 9, f. 15, ... 398
100. Skenea planorbis, Fabr. Forbes and Hanley, Brit. Moll., t. 74, f. 1, ... 398
1. Skenea lævis, Phil. (=serpuloides). Ibid, t. 88, f. 5, . 398
2. Skenea divisa, Forbes and Hanly. (=serpuloides). Ibid, t. 74, f. 4, ... 398

Plate 61.

3. Choristes elegans, Carp. Trans. Conn. Acad., v, t. 58, f. 27, ... 398
4–6. Homalogyra nitidissima, Forbes and Hanley. Brit. Moll., t. 73, f. 7–9, ... 399
7. Homalogyra rota, Forbes and Hanley. Ibid, t. 73, f. 10, 399
8, 9. Homalogyra Fischeriana, Monts. Jour. de Conch., t. 13, f. 1, 1869, ... 399
10, 11. Homalogyra densicostata, Jeffreys. Zool. Proc., t. 10, f. 1, 1884, ... 399

FIGURE. PAGE.
12–14. Homalogyra cancellata, Krauss. Südafr. Moll., t. 5, f. 29, ... 400
15. Rissoia ventricosa, Desm. Schwartz, Rissoa, t. 3, f. 36, 325
16. Rissoia splendida, Eichw. Ibid, t. 3, f. 37, . . . 325
17, 18. Rissoia variabilis, Mühlf. Ibid, t. 3, f. 35, 35, a. . 325
19–22. Rissoia membranacea, Ads. Küster, Conch. Cab., t. 1, f. 5, 8, 10, 16, ... 329
23, 24. Rissoia membranacea, var. octona, Nilss. Schwartz, Rissoia, t. 1, f. 8, ... 329
25, 26. Rissoia cornea, Lovén (= membranacea). Ibid, t. 1, f. 9, 9, a. 329
27. Rissoia Ehrenbergi, Phil. Ibid, t. 2, f. 23, . . . 327
28. Rissoia lineolata, Mich. Ibid, t. 2, f. 27, . . . 329
29. Rissoia similis, Scacchi. Ibid, t. 3, f. 28, . . . 327

PLATE 62.

30, 31. Rissoia decorata, Phil. Schwartz, Rissoa, t. 3, f. 33, 33, a. 326
32. Rissoia venusta, Phil. Ibid, t. 3, f. 42, . . . 331
33. Rissoia lia, Benoit. Specimen. 329
34, 35. Rissoia subcostulata, Schwartz (= costulata, Alder). Rissoa, t. 3, f. 32, 32, a. 326
36. Rissoia Guerini, Recluz. Ibid, t. 3, f. 34, . . . 326
37. Rissoia violacea, Desm. Ibid, t. 3, f. 42, . . . 330
38. Rissoia rufilabrum, Alder (= violacea, var.). Ibid, t. 3, f. 41, ... 330
39. Rissoia porifera, Lovén (= violacea, var.). Ibid, t. 3, f. 43, ... 330
40. Rissoia lilacina, Recluz. Ibid t. 3, f. 40, . . . 329
41. Rissoia monodonta, Bivona. Ibid, t. 1, f. 6, . . 330
42, 43. Rissoia auriscalpium, Linn. Ibid, t. 1, f. 1, 1, a. . 331
44. Rissoia elata, Phil. Ibid, t. 1, f. 2. 331
45. Rissoia oblonga, Desm. Küster, Conch. Cab., t. 16, f. 9, ... 331
46–48. Rissoia parva, Da Costa. Schwartz, Rissoa, t. 2, f. 12, a. b. 332
49, 50. Rissoia interrupta, Adams. Ibid, t. 2, f. 14, 14, a. . 332
51. Rissoia dolium, Nyst. Ibid, t. 2, f. 13, . . . 332
52. Rissoia inconspicua, Alder. Ibid, t. 2, f. 22, . . 327
53, 54. Rissoia pulchella, Phil. Ibid, t. 2, f. 21, 21, a. . 333

PLATE 63.

55. Rissoia radiata, Phil. Schwartz, Monog. Rissoa, t. 2, f. 26, ... 333
56. Rissoia plicatula, Riso. Ibid, t. 2, f. 25, . . . 325
57. Rissoia inconspicua, Alder. Ibid, t. 2, f. 22, . . . 334
58. Rissoia variegata, Schwartz (= inconspicua). Ibid, t. 2, f. 15, ... 334

FIGURE. PAGE.
59. Rissoia albella, Lovén. Ibid, t. 1, f. 10, ... 334
60–62. Rissoia albella, Var. Sarsi, Lovén. Ibid, t. 1, f. 11, . 334
63. Rissoia marginata, Mich. Ibid., t. 1, f. 16, . . . 334
64. Rissoia flammea, Frauenf. Voy. Novara, t. 2, f. 18, . 339
65. Rissoia incidata, Frauenf. Ibid, t. 2, f. 19, . . . 339
66. Rissoia costata, Ads. Küster, Conch. Cab., t. 3, f. 26, . 336
67. Rissoia punctura, Mtg. Ibid, t. 19, f. 4, ... 337
68. Rissoia Macandrewi, Manzoni. Ibid, t. 19, f. 13, . . 337
69. Rissoia microthyra, Martens. Mœbius' Mauritius, t. 20, f. 18, ... 339
70. Rissoia insignis, Folin. Les Meleagrin., t. 5, f. 2, . . 338
71. Rissoia striata, Mtg. Forbes & Hanley, Brit. Moll., t. 78, f. 9, ... 346
72. Rissoia Novarensis, Watson (= euchila). Zool. Proc., t. 35, f. 13, 1873, ... 335
73. Rissoia multilineata, Stimp. Tryon's Am. Conch., t. 11, f. 159, ... 346
74. Rissoia arenaria, Mighels. Ibid, t. 11, f. 160, . . . 347
75. Rissoia exarata, Stimpson. Ibid, t. 11, f. 161, . . . 347
76. Rissoia carinata, Mighels. Ibid, t. 11, f. 162, . . . 348
77. Rissoia castanea, Möller. Küster, Conch. Cab., t. 20, f. 2, 349
78. Rissoia crystallina, Garrett. Proc. Philad. Acad., t. 2, f. 25, 1873, ... 364
79. Rissoia truncata, Garrett. Ibid, t. 2, f. 26, 1873, . . 351
80. Rissoia Moniziana, Watson. Zool. Proc., t. 34, f. 10, 1873, 349
81. Rissoia vitrea, Mtg. Küster, Conch. Cab., t. 20, f. 16, . 351
82. Rissoia proxima, Alder. Ibid, t. 19, f. 3, . . . 351
83. Rissoia Lanciæ, Calcara. B. D. D. Moll. Rouss., t. 36, f. 1, 361
84. Rissoia scabra, Phil. Küster, Conch. Cab., t. 22, f. 3, . 303
85. Rissoia deliciosa, Jeffreys. Ibid, t. 23, f. 5, . . . 328
86. Rissoia Zetlandica, Mtg. Forbes & Hanley, Brit. Moll., t. 80, f. 1, ... 337

PLATE 64.

87. Rissoia saxatilis, Möller. Proc. N. S. Nat. Mus., t. 3, f. 8, 1886, ... 347
88. Rissoia leptalæa, Verrill. Trans. Conn. Acad., vi, t. 32, f. 10, ... 347
89. Rissoia Watsoni, Schwartz. Küster, Conch. Cab., t. 22, f. 10, ... 337
90. Rissoia brachia, Watson. Voy. Challenger, xv, t. 45, f. 8, 348
91. Rissoia ædonis, Watson. Ibid, xv, t. 45, f. 5, . . . 348
92. Rissoia mercurialis, Watson. Ibid, xv, t. 45, f. 12, . . 343
93. Rissoia castanella, Dall. Proc. U. S. Nat. Mus., t. 3, f. 5, 1886, ... 349
94. Rissoia Aurivillii, Dall. Ibid, t. 4, f. 8, 1886, . . . 349
95. Rissoia castanea, Möller. Trans. Conn. Acad., v, t. 43, f. 1, 349

FIGURE. PAGE.
96. Rissoia, Var. Alaskana, Dall. Proc. U. S. Nat. Mus., t. 4, f. 9, 1886, ... 349
97. Rissoia glaphyra, Watson. Voy. Challenger, xv, t. 45, f. 6, ... 349
98. Rissoia pachia, Watson. Ibid, xv t. 45, f. 7, . . . 348
99. Rissoia macra, Watson. Ibid, xv, t. 45, f. 10, . . 351
100. Rissoia transenna, Watson. Ibid, xv, t. 45, f. 9, . . 348
1. Rissoia lineata, Risso. B. D. D. Moll. Rouss., t. 33, f. 5, 360
2. Rissoia subcrenulata, Schwartz. Küster, Conch. Cab., t. 22, f. 7, ... 362
3. Rissoia Peloritana, Arad. (= lineata). Ibid, t. 25, f. 11, 360

PLATE 65.

4. Rissoia strangulata, Brusina. Conch. Dalmat., f. 8, . 325
5. Rissoia aurantiaca, Watson. Zool. Proc., t. 34, f. 3, 1873, 326
6. Rissoia callosa, Manzoni. Küster, Conch. Cab., t. 18, f. 15, 350
7. Rissoia cristallinula, Manzoni. Ibid, t. 18, f. 13, . . 350
8. Rissoia crispa, Watson. Zool. Proc., t. 34, f. 6, 1873, . 338
9. Rissoia reticulata, Mtg. Küster, Conch. Cab., t. 21, f. 10, 361
10. Rissoia Mariæ, Bacq. (= Gergonia). B. D. D. Moll. Rouss., t. 36, f. 8, ... 362
11, 12. Rissoia cimex, Linn. Küster, Conch. Cab., t. 3, f. 2, 3, 359
13. Rissoia lignea, Reeve (= lineata). Conch. Icon., f. 81, . 360
14. Rissoia crenulata, Mich. Küster, Conch. Cab., t. 19, f. 6, 365
15. Rissoia Montagui, Payr. Ibid, t. 3, f. 7, ... 360
16. Rissoia angulata, Jeffreys. Ibid, t. 23, f. 7, . . . 334
17. Rissoia aurita, Monts. Ibid, t. 20, f. 10, ... 335
18. Rissoia turricula, Jeffreys. Ibid, t. 23, f. 11, . . . 335
19. Rissoia doliolum, Phil. Küster, Conch. Cab., t. 6, f. 20, . 335
20. Rissoia Algeriana, Monts. Ibid, t. 21, f. 13, . . . 333
21. Rissoia Sibirica, Loche. Ibid, t. 23, f. 16, . . . 336
22. Rissoia mirabilis, Manzoni. Ibid, t. 16, f. 10, . . . 336
23, 24. Rissoia gibbur, Watson. Zool. Proc., t. 34, f. 7, 1873, 336
25. Rissoia subareolata, Monts. Küster, Conch. Cab., t. 22, f. 15, ... 363
26. Rissoia parvula, Jeffreys. Zool. Proc., t. 9, f. 2, 1884, . 337
27. Rissoia cimicoides, Forbes. Küster, Conch. Cab., t. 21, f. 2, 362
28. Rissoia Mayeni, Friele. Ibid, t. 22, f. 13. . . . 338
29. Rissoia aspera, Phil. (= lineata, Var). Ibid, t. 22, f. 5, . 360
30. Rissoia calathus, Forbes & Hanley. Ibid, t. 22, f. 2, . 360
31. Rissoia Fischeri, Jeffreys. Zool. Proc., t. 9, f. 1, 1884, . 361
32. Rissoia Canariensis, d'Orb. Küster, Conch. Cab., t. 3, f. 20, 360
33, 34. Rissoia Leacocki, Watson. Zool. Proc., t. 34, f. 1, 1873, ... 363

PLATE 66.

35. Rissoia Mauritiana, Martens. Moebius' Mauritius, t. 20, f. 17, ... 367

FIGURE. PAGE.

36. Rissoia grossa, Mich. Küster, Conch. Cab., t. 16, f. 8, . 331
37. Rissoia Frauenfeldiana, Brusinà. Faun. Dalmat., f. 7, . 326
38. Rissoia hispidula, Monts. Küster, Conch. Cab., t. 21, f. 12, 363
39. Rissoia affinis, Jeffreys. Ibid, t. 23, f. 15, . . . 347
40. Rissoia fenestrata, Krauss. Sudaf. Moll., t. 5, f. 20, . 364
41. Rissoia acutelirata, Carp. Specimen. 361
42. Rissoia stigmatica, Frauenf. Moll. Novara Exped., t. 2, f. 17, ... 364
43. Rissoia olivacea, Dunker. Ibid, t. 2, f. 14, . . . 339
44. Rissoia salebrosa, Frauenf. Ibid, t. 2, f. 15, . . . 327
45. Rissoia Novarensis, Frauenf. Ibid, t. 2, f. 16, . . . 329
46. Rissoia elegans, Angas. Zool. Proc., t. 26, f. 15, 1877, . 364
47. Rissoia gracilis, Angas. Ibid, t. 26, f. 16, 1877, . . 364
48. Rissoia Weinkauffi, Schwartz. Küster, Conch. Cab., t. 21, f. 15, ... 366
49. Rissoia dictyophora, Phil. Ibid, t. 3, f. 28, . . . 366
50. Rissoia interfossa, Nevill. Ibid, t. 19, f. 16, . . . 364
51. Rissoia lactea, Mich. Ibid, t. 3, f. 5, ... 365
52. Rissoia Asturiana, Fischer. Fonds de la Mer, ii, t. 2, f. 5, 352
53. Rissoa picta, H. Adams. Zool. Proc., t. 28, f. 2, 1868, . 366
54. Rissoa lucida, H. Adams. Ibid, t. 28, f. 3, 1868, . . 366
55. Rissoa pagodula, B. D. D. Küster, Conch. Cab., t. 22, f. 4, 366
56. Rissoa Jeffreysii, Waller. Ibid, t. 21, f. 1, . . . 361
57. Rissoa Caribæa, d'Orb. Moll. Cuba, t. 11, bis, f. 32, . 363
58. Rissoa striatula, Mtg. Küster, Conch. Cab., t. 6, f. 8, . 367
59. Rissoa rudis, Phil. Ibid, t. 3, f. 18, ... 367
60. Rissoa Testæ, Arad. Ibid, t. 23, f. 9, ... 368
61. Rissoa abyssicola, Jeffr. (= Testæ). Forbes & Hanley, Brit. Moll., t. 78, f. 2, ... 368
62. Rissoa subsoluta, Aradas. Küster, Conch. Cab., t. 21, f. 8, 368

PLATE 67.

66. Rissoia Fremenvllli, Audouin. Savigny, Moll. Egypte, t. 3, f. 20, ... 367
67. Rissoia Desmaresti, Audouin. Ibid, t. 3, f. 21, . . 330
68. Rissoia d'Orbignyi, Audouin. Ibid, t. 3, f. 22, . . 327
69. Rissoia Sismondiana, Issel. Ibid, t. 3, f. 33, . . . 332
70. Rissoia pyrrhias, Watson. Moll. Challenger Exped., t. 44, f. 4, ... 328
71. Rissoia xanthias, Watson. Ibid, t. 44, f. 5, . . . 334
72. Rissoia Fayalensis, Watson. Ibid, t. 44, f. 7, . . . 328
73. Rissoia Pernambucensis, Watson. Ibid, t. 44, f. 9, . . 335
74. Rissoia amblia, Watson. Ibid, t. 44, f. 8, . . . 333
75. Rissoia microstoma, Watson. Ibid, t. 44, f. 10, . . 328
76. Rissoia didyma, Watson. Ibid, t. 44, f. 1, . . . 362
77. Rissoia tarsodes, Watson. Ibid, t. 44, f. 2, . . . 362
78. Rissoia trajectus, Watson. Ibid, t. 44, f. 6, . . . 328
79. Rissoia lusciniæ, Watson. Ibid, t. 44, f. 3, . . . 362

FIGURE. PAGE.
80. Rissoia scrobiculator, Watson. Ibid, t. 46, f. 4, . . 339
81. Rissoia badia, Watson. Ibid, t. 46, f. 3, ... 339
82. Rissoia harpa, Verrill. Trans. Conn. Acad. v, t. 57, f. 6, 336

PLATE 68.

83. Rissoa areolata, Stimp. Trans. Conn. Acad. v, t. 43, f. 2, 361
84. Rissoina gradata, d'Orb. Moll. Cuba, t. 11, bis, f. 38, . 378
85. Rissoa Auberiana, d'Orb. Ibid, t. 11, bis, f. 35, . . 337
86. Rissoa Frauenfeldi, Schwartz. Moll. Voy. Novara, t. 2, f. 13, ... 340
88. Rissoa pinnæ, Krauss. Sudaf. Moll., t. 5, f. 21, . . 333
89. Rissoina infrastricta, Garrett. Proc. Philad. Acad., t. 2, f. 21, 1873, ... 378
90. Rissoa venusta, Garrett. Ibid, t. 2, f. 23, 1873, . . 367
91. Rissoa cheilostoma, Tenison Woods. Specimen. . . 366
92. Rissoa grisea, Martens. Nat. Hist. Mus. Hamburg, t. 2, f. 4, 1886, ... 349
93. Rissoa cingulata, Phil. Küster, Conch. Cab., t. 22, f. 8, . 350
94. Rissoa tenera, Phil. Ibid, t. 22, f. 16, ... 350
95. Iravadia sulcifera, Troschel. Ibid, t. 13, f. 8, . . . 394
96. Rissoa brychia, Verrill. Trans. Conn. Acad. vi, t. 32, f. 9, 335
97. Rissoa syngenes, Verrill. Ibid, vi, t. 32, f. 11, . . 328
98. Rissoa Waabitica, Issel. Moll. Mar Rosso, t. 2, f. 10, . 330
99. Rossoa Psammitica, Issel. Ibid, t. 2, f. 9, . . . 330
100. Rissoina villica, Gld. Reeve. (= subvillica). Conch. Icon., f. 98, ... 374
1. Rissoina flexuosa, Gould. Ibid, f. 97, ... 380
2. Rissoina turricula, Angas (= flexuosa). Ibid, f. 69, . 381
3. Rissoina fimbriata, Souverb. Ibid, f. 45, . . . 378
4. Rissoina rosea, Desh. Ibid, f. 42, ... 380
5. Rissoina Gentilissiana, Sowb. (= Hydrobia Gentilsiana, Crosse). Ibid, f. 44. 369
6. Rissoina crassa, Angas (= Rissoi). Ibid, f. 70, . . 378
7. Rissoina fasciata, Angas. Ibid, f. 119, ... 380
8. Rissoina cincta, Angas. Ibid, f. 71. 380
9. Rissoina Deshayesiana, Recluz. Ibid, f. 62, . . . 382
10. Rissoina Bureasensis, Sowb. Ibid, f. 90, ... 380
11. Rissoina australis, Sowb. Ibid, f. 123, ... 384
12. Rissoina Cumingii, Reeve. Ibid, f. 4, ... 386
13. Rissoina crebrisulcata, Sowb. Ibid, f. 56, . . . 384
14. Rissoina crassilabrum, Garrett. Ibid, f. 59, . . . 389
15. Rissoina assimilis, Jickeli. Jahrb. Mal. Gesell., xi, t. 6, f. 1–3, ... 369
16. Rissoina striatula, Pease. Am. Jour. Conch. iii, t. 24, f. 31, 387
17. Rissoina flammea, Pease. Ibid, iii, t. 24, f. 33, . . 387
18. Rissoina vitrea, Garrett. Proc. Philad. Acad., t. 2, f. 19, 1873, ... 342
19. Rissoina Zeltneri, Folin. Les Meleagrinicoles, t. 5, f. 1, . 387

FIGURE. PAGE.

20. Rissoina Caledonica, Crosse. Conch. Icon., f. 86, . . 342

PLATE 69.

21. Rissoia semistriata, Mtg. Küster, Conch. Cab., t. 6, f. 11, 352
22. Rissoia pulcherrima, Jeffreys. Ibid, t. 18, f. 5, . . 352
23. Rissoia picta, Jeffreys. Ibid, t. 18, f. 20, . . . 352
24. Rissoia concinna, Monts. (= Benjamina, Mts.). Ibid, t. 18, f. 11, ... 352
25. Rissoia cingillus, Mtg. Ibid, t. 6, f. 17, ... 342
26. Rissoia depicta, Weink. (= pulcherrima). Ibid, t. 18, f. 12, ... 352
27. Rissoia albugo, Watson. Ibid, t. 18, f. 9, . . . 353
28. Rissoia perminima, Manzoni. Ibid, t. 18, f. 8, . . 353
29. Rissoia turgida, Jeffreys. Ibid, t. 20, f. 5, . . . 353
30. Rissoia tumidula, Sars. Ibid, t. 20, f. 4, ... 353
31. Rissoia abjecta, Watson. Ibid, t. 20, f. 15, . . . 353
32. Rissoia concinnata, Jeffreys. Ibid, t. 24, f. 1, . . . 356
33. Rissoia fulgida, Adams. Forbes & Hanley, Brit. Moll., t. 81, f. 2, ... 354
34. Rissoia fusca, Phil. Moll. Sicil. ii, t. 24, f. 4, . . . 354
35. Rissoia Alleryana, Arad. Benoit. Küster, Conch. Cab., t. 25, f. 7, ... 354
36. Rissoia Sciutiana, Arad. Benoit. Ibid., t. 25, f. 8, . . 354
37. Rissoia soluta, Phil. (= Alderi). Forbes & Hanley, Brit. Moll., t. 75, f. 3, ... 356
38. Rissoia Scillæ, Seguenza. Küster, Conch. Cab., t. 25, f. 9, 358
39. Rissoia micrometrica, Seguenza. Ibid, t. 25, f. 5, . . 354
40. Rissoia contorta, Jeffreys. B. D. D. Moll. Rouss., t. 37, f. 13, ... 340
41. Rissoia, contorta. Var. elata. Ibid, t. 37, f. 18, . . 340
42. Rissoia, contorta, Var. intorta, Mts. Ibid, t. 37, f. 17, . 340
43, 44. Rissoia nitida, Brusina. Küster, Conch. Cab., t. 25, f. 3, 4, ... 340
45. Rissoia glabrata, Mühlf. Zool. Proc., t. 36, f. 24, 1873, . 340
46. Rissoia sabulum, Cantr. (= glabrata). Ibid., t. 36, f. 25, 1873, ... 340
47. Rissoia lincta, Watson. Ibid, t. 36, f. 26, 1873, . . 341
48. Rissoia lævis, Monts. Küster, Conch. Cab., t. 20, f. 12, . 341
49. Rissoia epidaurica, Brusina. Conch. Dalmat., f. 10, . 341
50, 51. Rissoia contabulata, Frauenf. Moll. Voy. Novara, t. 2, f. 20b, a, ... 341
52. Rissoia typica, Garrett. Proc. Philad. Acad., t. 3, f. 55, 1873, ... 359
53. Rissoia venustula, Folin. Fonds de la Mer, ii, t. 8, f. 5, . 341
54. Rissoia coriacea, Manzoni. Küster, Conch. Cab., t. 16, f. 11, ... 358
55. Rissoia tenuisculpta, Watson. Ibid, t. 18, f. 7, . . 343
56. Rissoia Mörchi, Collin. Snegle, Kara Havt., 16, . . 348

FIGURE. PAGE.

57. Rissoia balteata, Manzoni. Jour. de Conch., t. 10, f. 7, 1868, ... 342

PLATE 70.

58. Rissoia semicarinata, Folin. Fonds de la Mer. t. 31, f. 8, ... 345
59. Rissoia alvearium, Watson. Moll. Voy. Challenger, t. 46, f. 1, ... 343
60. Rissoia scopulorum, Watson. Ibid, t. 45, f. 4, . . 343
61. Rissoia rustica, Watson. Ibid, t. 44, f. 11, . . . 343
62. Rissoia anguliferens, Folin. Fonds de la Mer, i, t. 20, f. 6, ... 343
63. Rissoia polychroma, Folin. Ibid, i, t. 20, f. 5, . . 355
64. Rissoia globulus, Moller. Trans. Conn. Acad. v, t. 43, f. 3, ... 359
64a. Lacuna incerta, d'Orb. Moll. Cuba, t. 16, f. 8, . . 282
64b. Reymondia Horei, Smith. Zool. Proc, 1881, t. 34, f. 7, 285
64c. Rissoia aculeus, Gould. Invert. Mass., fig. 568, . . 347
65. Rissoia Marionensis, Watson. Moll. Voy. Challenger, t. 44, f. 12, ... 356
66. Rissoia principis, Watson. Ibid, t. 44, f. 13, . . 356
67. Rissoia australis, Watson. Ibid, t. 45, f. 1, . . . 356
68. Rissoia philomelæ, Watson. Ibid, t. 45, f. 2, . . 356
69. Rissoia quisquiliarum, Watson. Ibid, t. 45, f. 3, . 357
70. Rissoia Edwardiensis, Watson. Ibid, t. 45, f. 11, . . 357
71. Rissoia sinapi, Watson. Ibid, t. 45, f. 13, . . . 357
72. Rissoia triangularis, Watson. Ibid, t. 46, f. 2, . . 357

PLATE 71.

73. Rissoia Stimpsoni, Smith. Ann. N. Y. Lyc, ix, 393, . 345
74. Rissoia minuta, Totten. Am. Mar. Conch., t. 11, 153, . 346
75. Rissoia lævis, De Kay. Ibid, t. 11, f. 163, . . . 346
76. Rissoia robusta, Dall. var. Martyni. Proc. U. S. Nat. Mus., t. 3, f. 9, 1886, ... 345
77. Rissoia robusta, Dall. var. scipio. Ibid, t. 4, f. 10, 1886, 345
78. Rissoia Aleutica, Dall. Ibid, t. 3, f. 11, 1886, . . 345
79. Rissoia cerinella, Dall. Ibid, t. 4, f. 12, 1886, . . 345
80. Rissoia exilis, Tryon. Am. Jour. Conch., ii, t. 2, f. 18, . 345
81. Rissoia Australiæ, Dunker. Küster, Conch. Cab., t. 24, f. 13, ... 344
82. Rissoia Petiningensis, Gould. (=Paludestrina). Moll. Wilkes Exped., f. 152, ... 346
83. Rissoia Lantzii, Vélain. Arch. Zool. Exper., vi, t. 3, f. 14, ... 344
84. Rissoia Cazini, Vélain. Ibid, vi, t. 3, f. 15, . . . 344
85. Rissoia apicina, Verrill. Trans. Conn. Acad., vi, t. 32, f. 8, ... 357

FIGURE. PAGE.

86. Rissoia madreporica, Issel. Moll. Mar Rosso, t. 2, f. 8, ... 353
87. Rissoia Villæ, Issel. Savigny, Egypte, t. 3, f. 17, . 344
88. Rissoia subtruncata, Vélain. Arch. Zool. Exper., vi, t. 3, f. 16, ... 344
89. Rissoia purpurea, Hutton. Specimen, . . . 344
90. Rissoa Tiberiana, Issel. Savigny's Egypte., t. 3, f. 16, . 359
91. Rissoa hyalina, Garrett. Proc. Philad. Acad., t. 2, f. 24, 1873, ... 358
92. Rissoa latior, Mighels and Adams. Am. Mar. Conch., f. 154, ... 357
93. Rissoa sculptilis, Monts. Küster, Conch. Cab., t. 22, f. 12, ... 353
94. Rissoa Milleri, Folin. Fonds de la Mer, i, t. 22, f. 5, . 342
95. Rissoa conica, Perier. Ibid, i, t. 1, f. 4, . . . 342
96. Rissoa pulicaria, Folin. Ibid, ii, t. 9, f. 4, . . . 355
97. Rissoa Brazieri, Tenison-Woods. Specimen, . . 355
98. Rissoa limbata, Hutton. Specimen, ... 355
99. Rissoa Lauræ, Folin. Fonds de la Mer, i, t. 24, f. 3. . 351
100. Rissoa nitens, Dunker. Moll. Novara. Exped., t. 2, f. 22, 355
1. Rossoa atropurpurea, Dunker. Ibid, t. 2, f. 21, . . 355
2. Rissoa Georgiana, Pfeffer. Nat. Hist. Mus. Hamburg, t. 2, f. 3, 1885, ... 346
3. Rissoa Kergueleni, Smith. Küster. Conch. Cab, t. 24, f. 3, ... 357
4. Rissoa nigra, Krauss. Sudaf. Moll., t. 5, f. 19. . . 358
5. Rissoa littoriniformis, Garrett. Proc. Philad. Acad., t. 2, f. 20, 1873, ... 358
6. Barleeia rosea, Hutton. Specimen, ... 393
7. Rissoa melanura, Woods. Specimen, ... 358
8. Rissoa cyclostoma, Woods. Specimen, . . . 344
9. Rissoa Mariæ, Woods. Specimen, ... 354
10. Rissoa Atkinsoni, Woods. Specimen, . . . 354
11. Rissoa Angeli, Woods. Specimen, ... 358

1

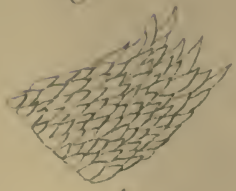
2

6

10

5

3


4

7

12

13

8

9

9

17

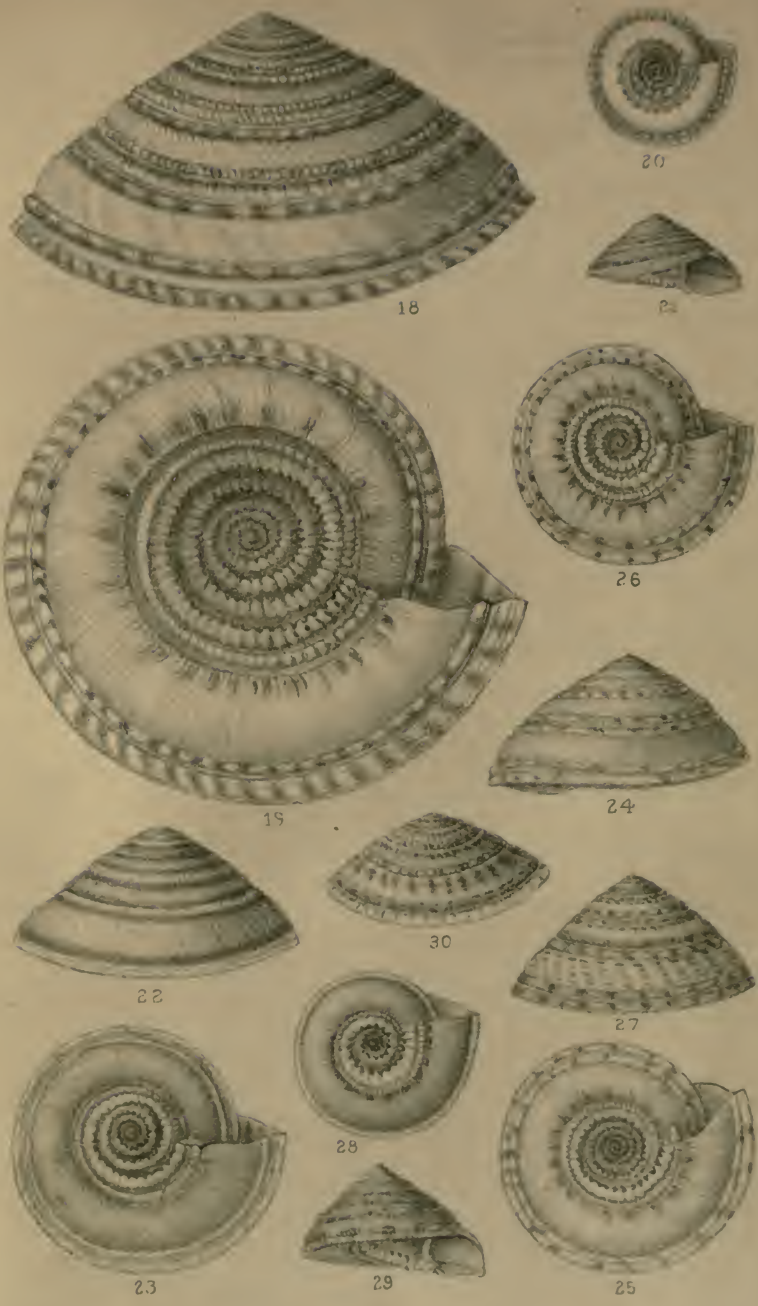
17

11

16

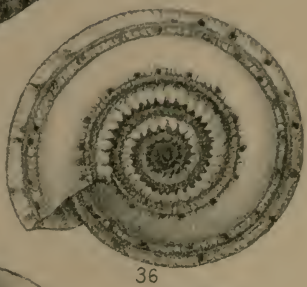
15

14


18
20
21
19
26
24
30
22
27
28
23
29
25

31

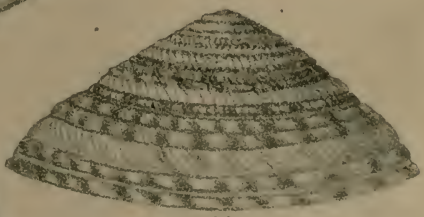
38



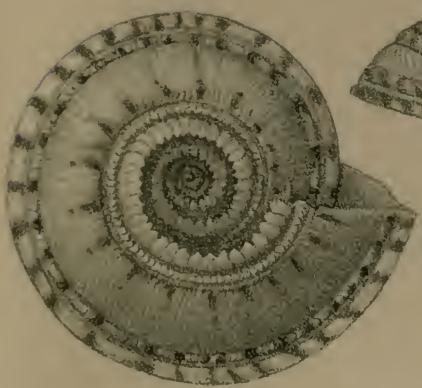
36

32

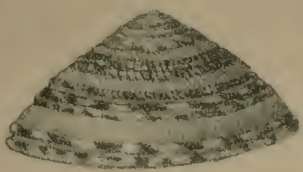
37



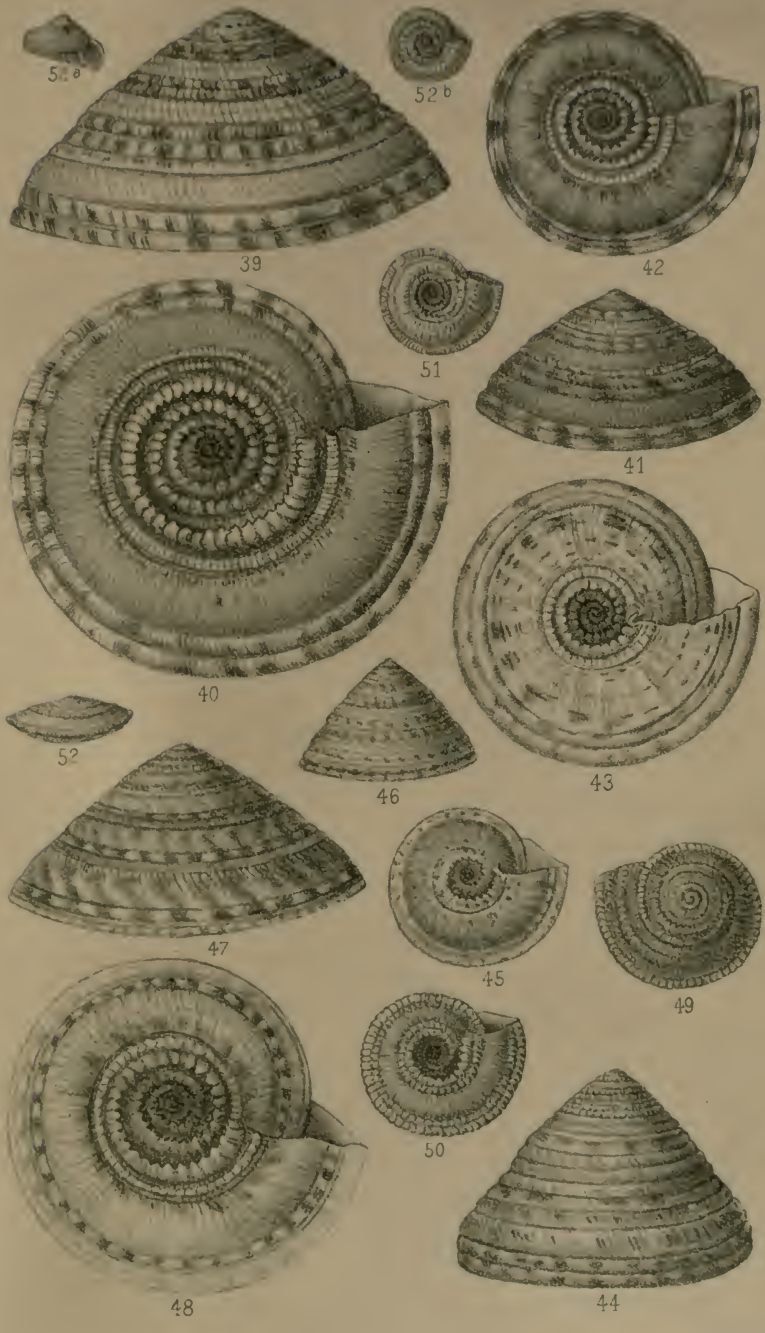
33



34

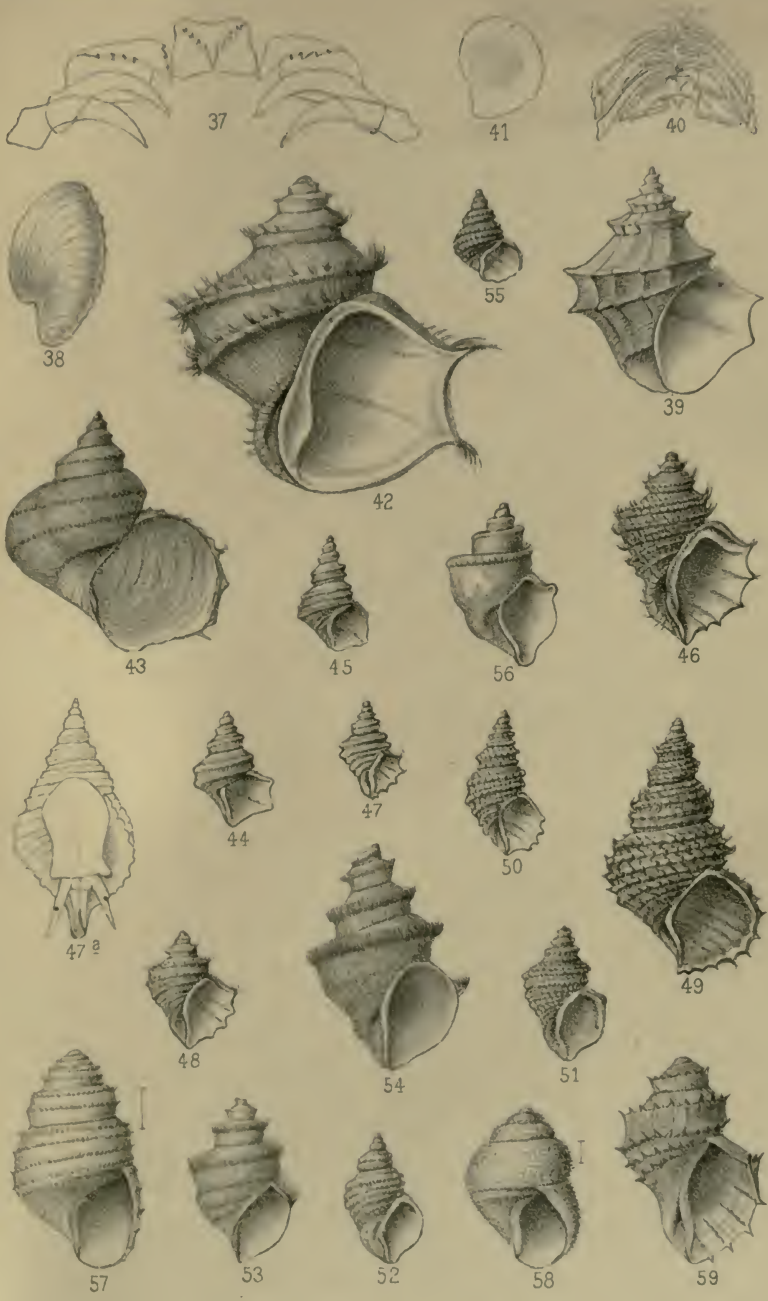


35

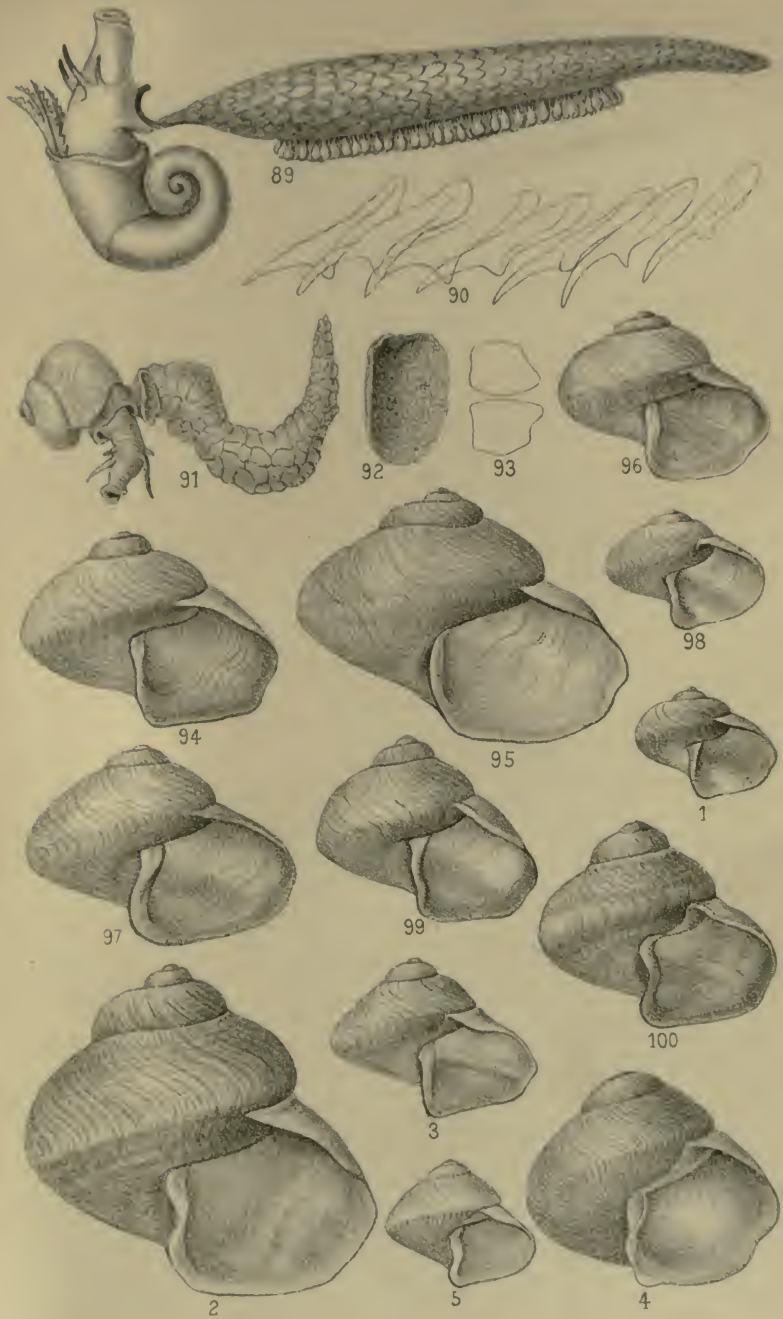

52 a
52 b
39
42
51
41
40
52
46
43
47
45
49
50
48
44

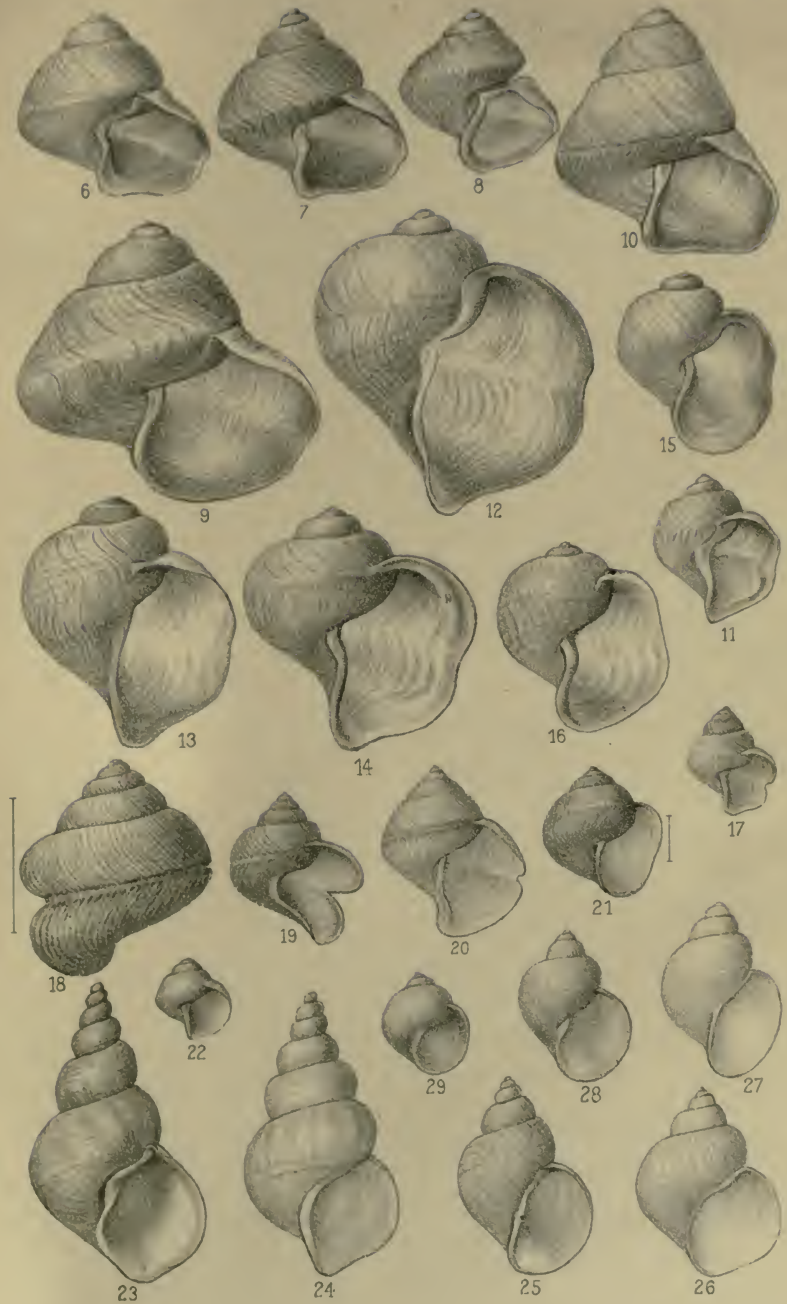
51
71
72
54
56
58
53
55
60
62
63
68
59
61
69
67
66
73
74
64
70
65
78
79
77
80
75
83
85
82
81
76
84
86a
86
87
88

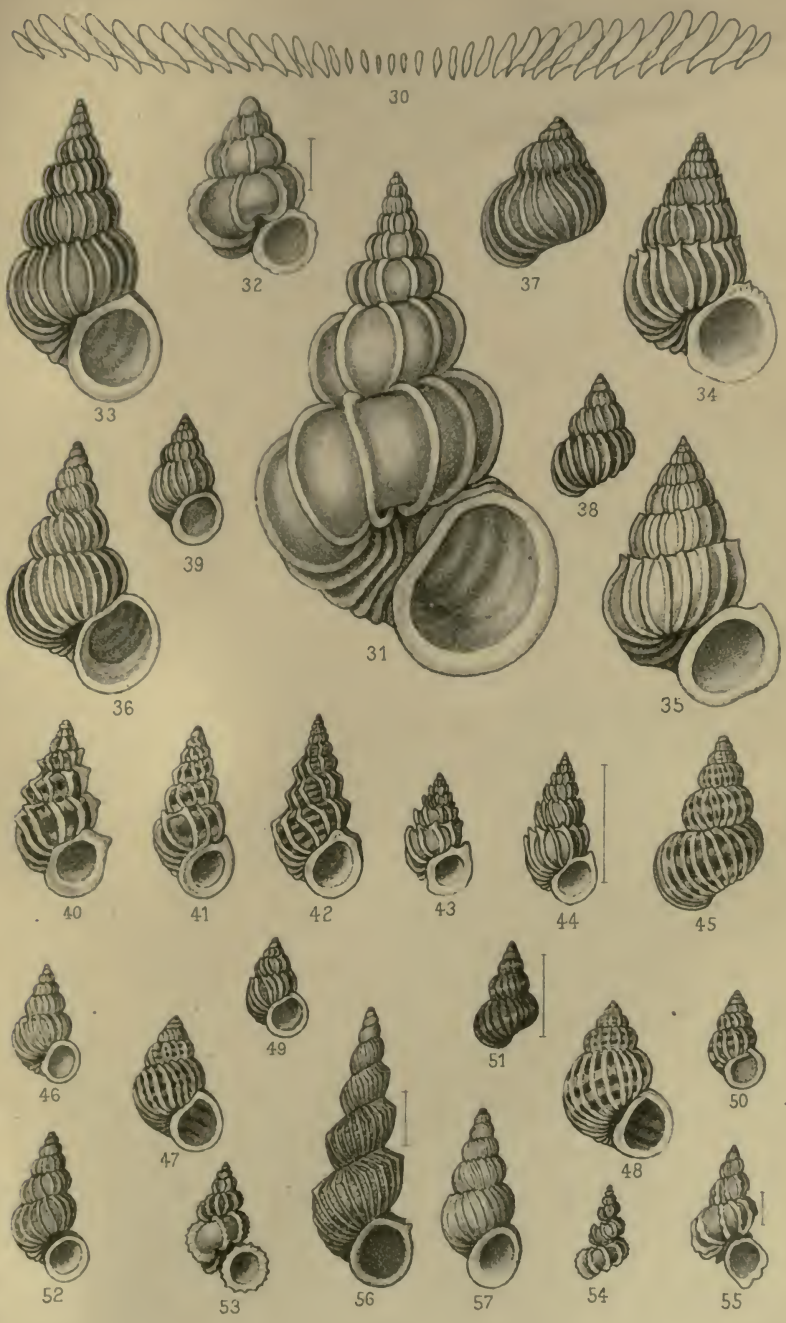
89
90
99
91
97
98
92
95
96
1
100
93
4
5
94
3
6
7
8
12
9
10
11
15
16
13
14
19
21
17
26
27
28
20
18
22
29
25
2/1
30
23
35
36
34
32
31
24
4/1
33


37
41
40
38
55
39
42
43
45
56
46
47
44
47
50
47a
49
48
54
51
57
53
52
58
59

60
61
62
63
67
66
88
64
69
68
71
72
73
74
75
77
78
76
70
79
80
84
85
83
86
87
82
81


89
90
91
92
93
96
94
95
98
1
97
99
100
3
2
5
4


6
7
8
10
9
12
15
13
14
16
11
18
19
20
21
17
22
29
28
27
23
24
25
26


30
32
37
33
34
39
38
31
36
35
40
41
42
43
44
45
46
49
51
47
50
48
52
53
56
57
54
55

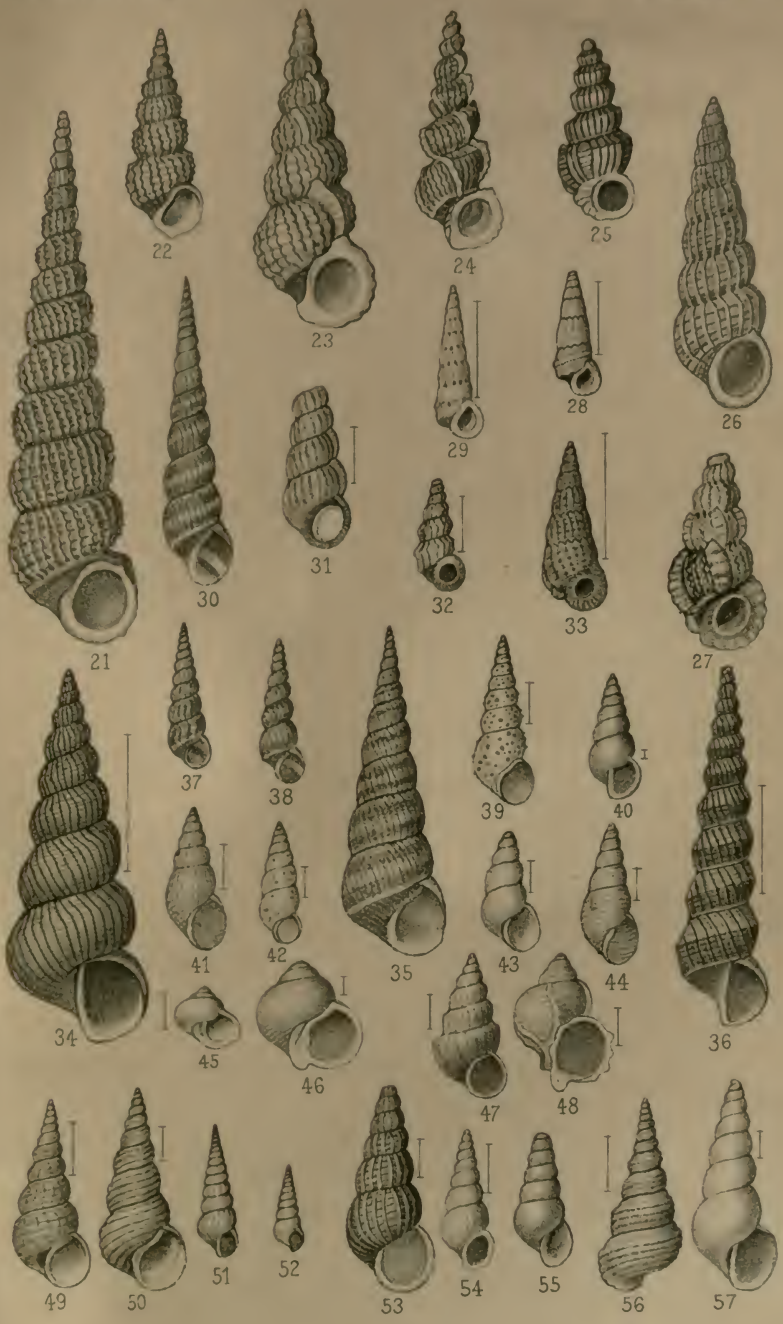
58
61
60
62
59
64
65
63
66
70
67
69
68
75
72
71
84
73
78
80
83
74
77
76
79
87
85
86
81
82

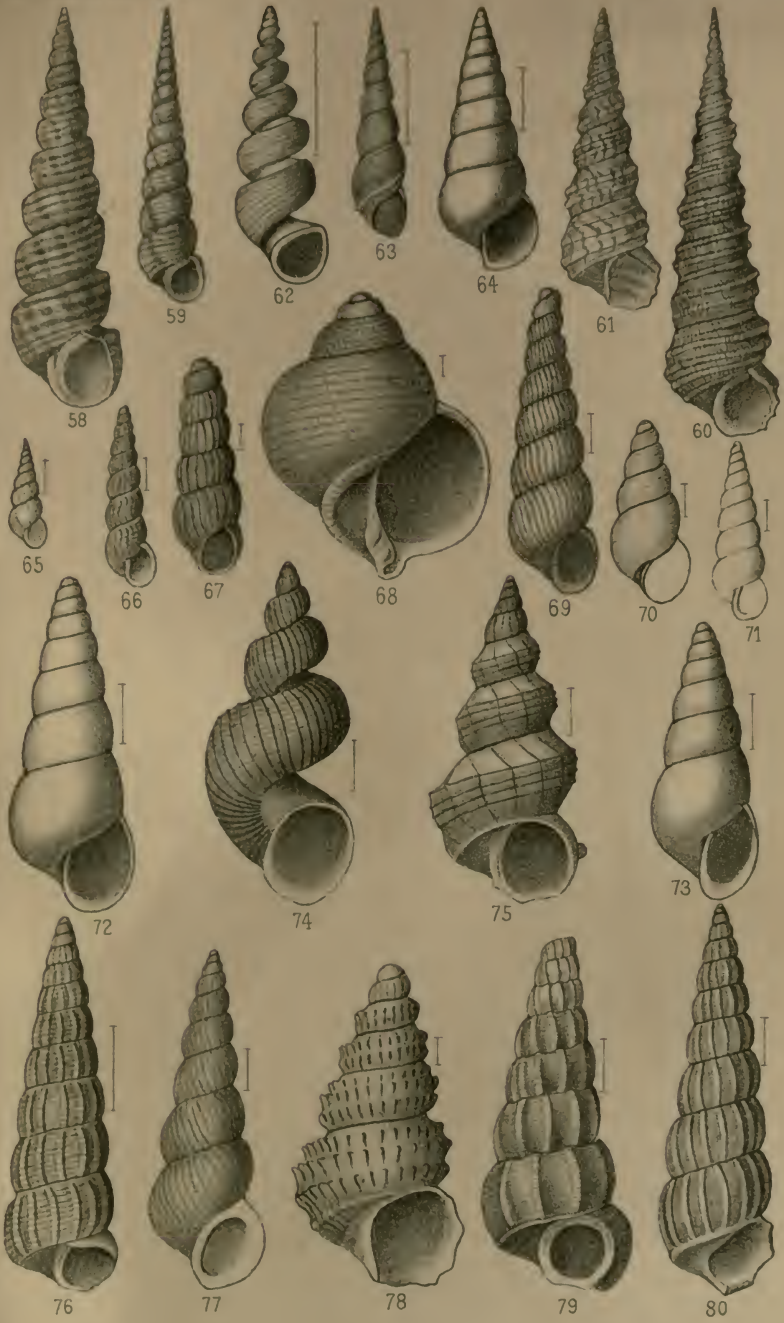
88
90
92
95
93
91
89
94
98
96
100
97
11
8
99
1
2
13
3
10
6
5
9
4
7
12
14
17
18
19
15
16

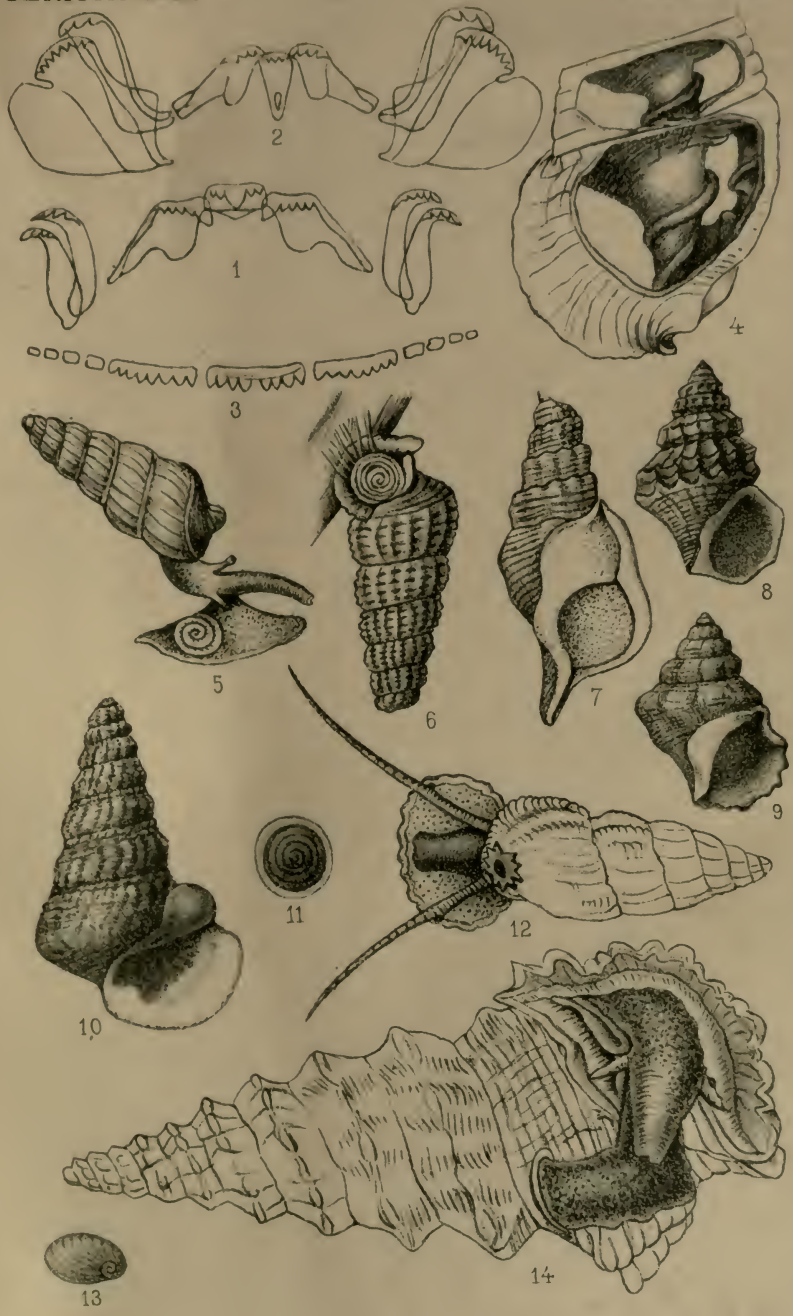
20
21
22
23
25
26
24
27
28
29
32
33
31
34
35
36
37
38
39
40
41
42
43
47
44
46
49
45
55
48
51
50
52
54
53
56
60
57
59
58

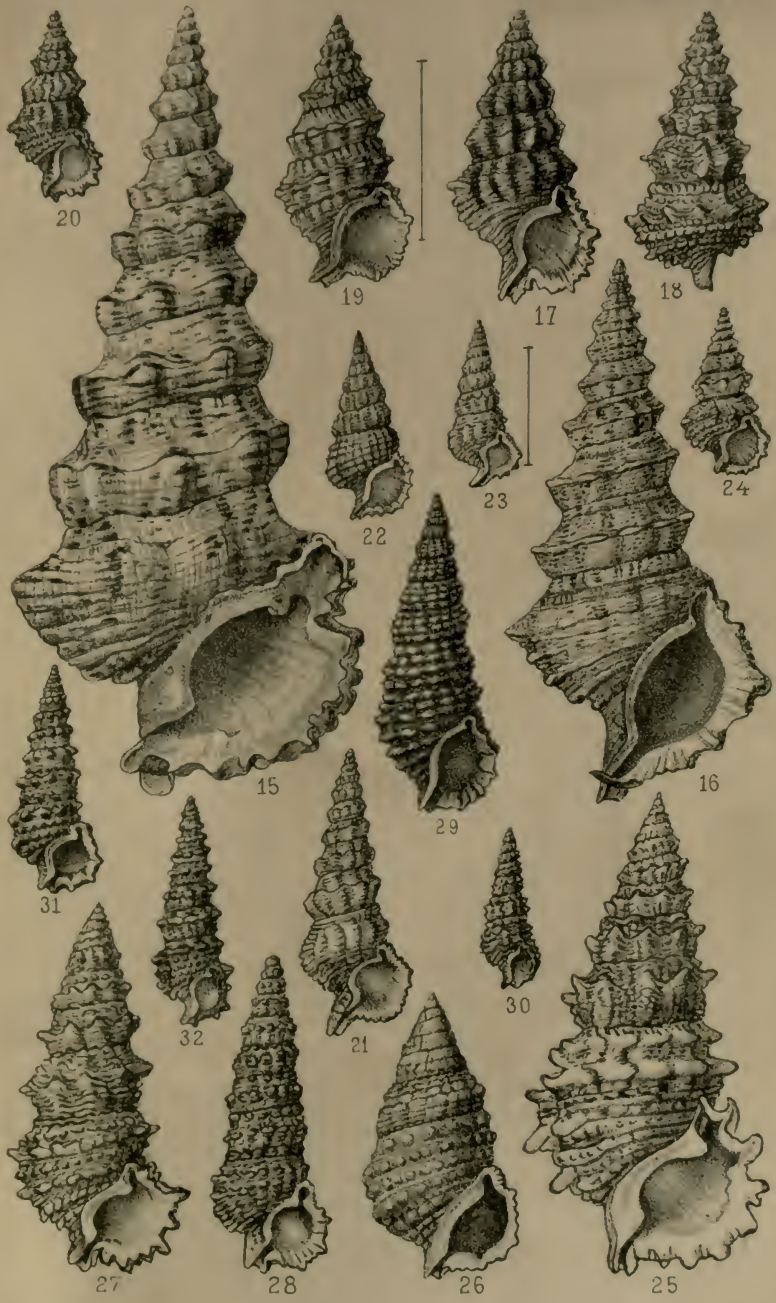
61
62
63
64
65
66
67
68
69
72
73
74
71
70
77
75
76
80
78
79
85
81
82
84
87
83
88
86

89
91
93
92
90
1
95
94
96
97
98
99
100
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

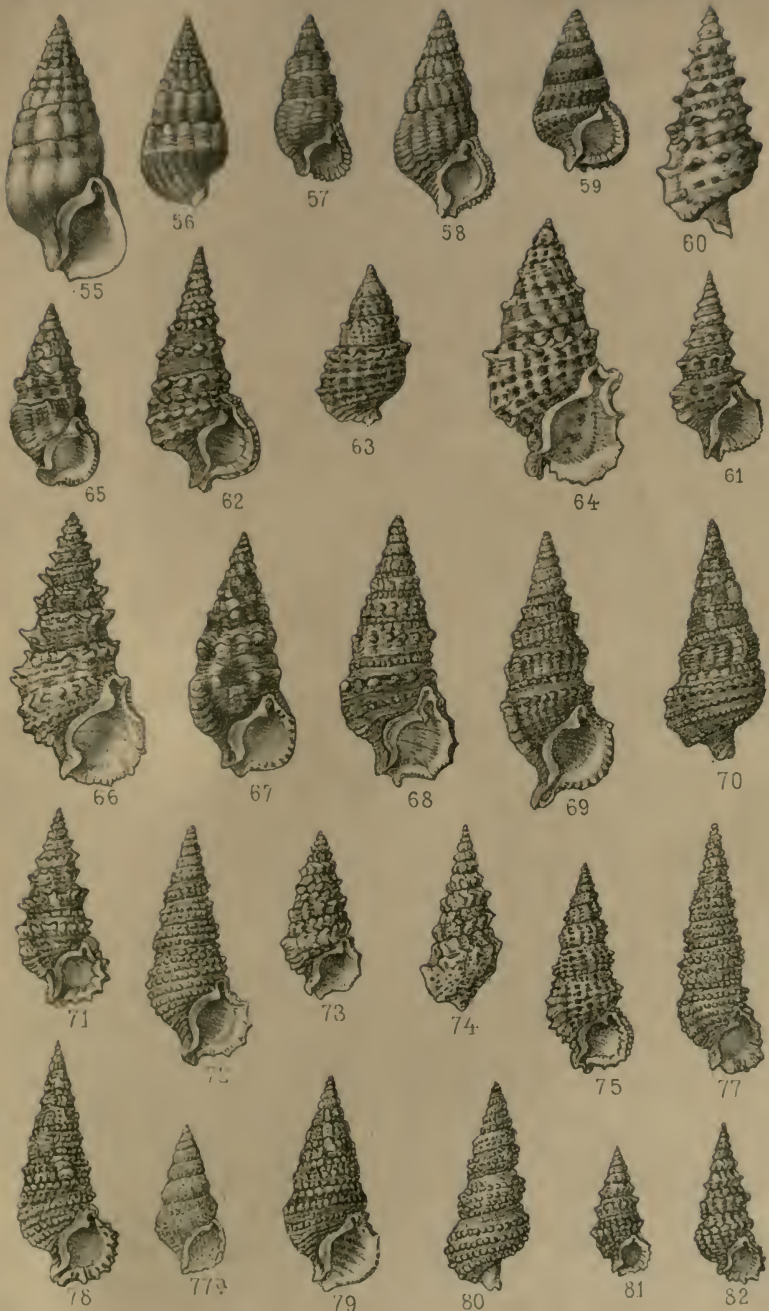

22
23
24
25
21
30
31
29
28
26
32
33
27
37
38
39
40
34
41
42
35
43
44
36
45
46
47
48
49
50
51
52
53
54
55
56
57


58
59
62
63
64
61
60
65
66
67
68
69
70
71
72
74
75
73
76
77
78
79
80


2
1
4
3
5
6
7
8
9
11
12
10
14
13


20
19
17
18
22
23
24
15
29
16
31
32
21
30
27
28
26
25

33
35
41
40
38
39
37
36
43
42
34
48,a
48
46
51
52
54
49
44
53
47
50
45


55
56
57
58
59
60
65
62
63
64
61
66
67
68
69
70
71
73
74
75
77
78
79
80
81
82

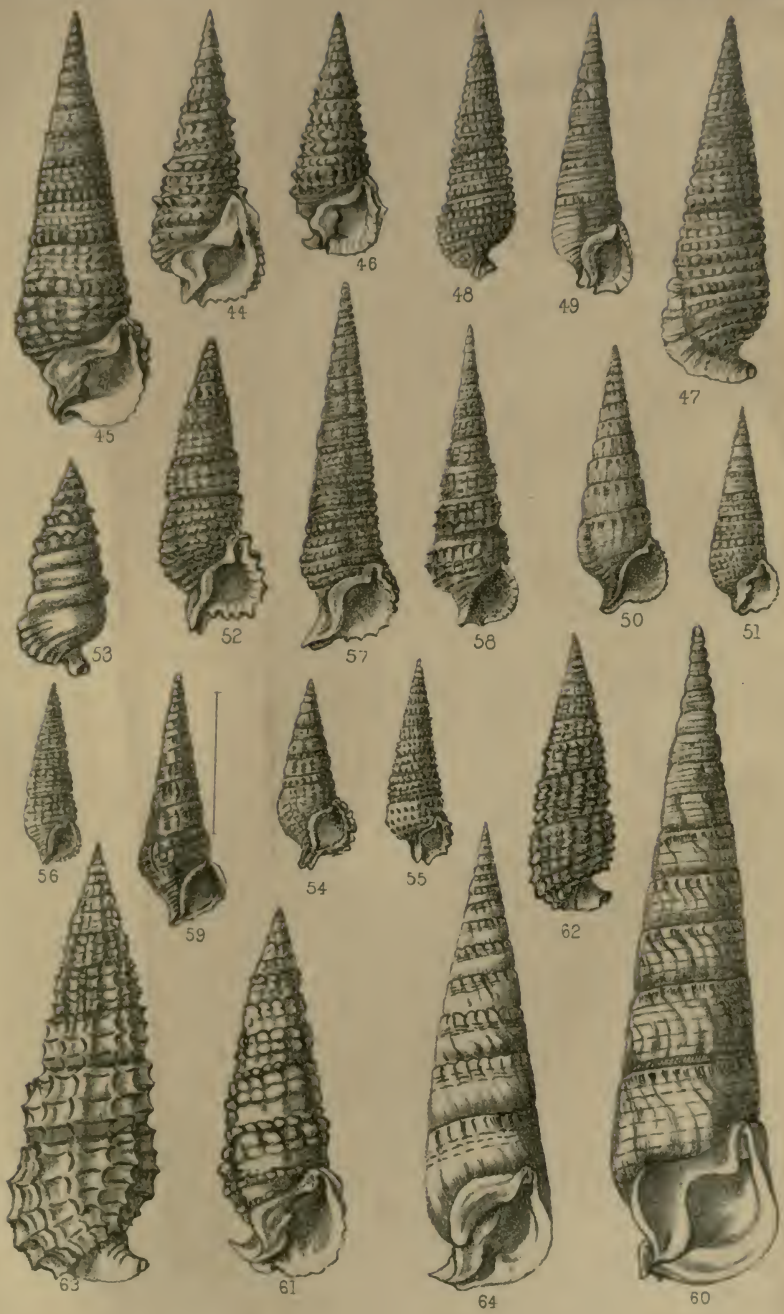
82
83
84
85
86
87
94
93
91
90
89
88
95
96
97
98
99
100
92
1
2
3
4
7
6
5
8
9
10
11
12
13
18
17
15
16
14

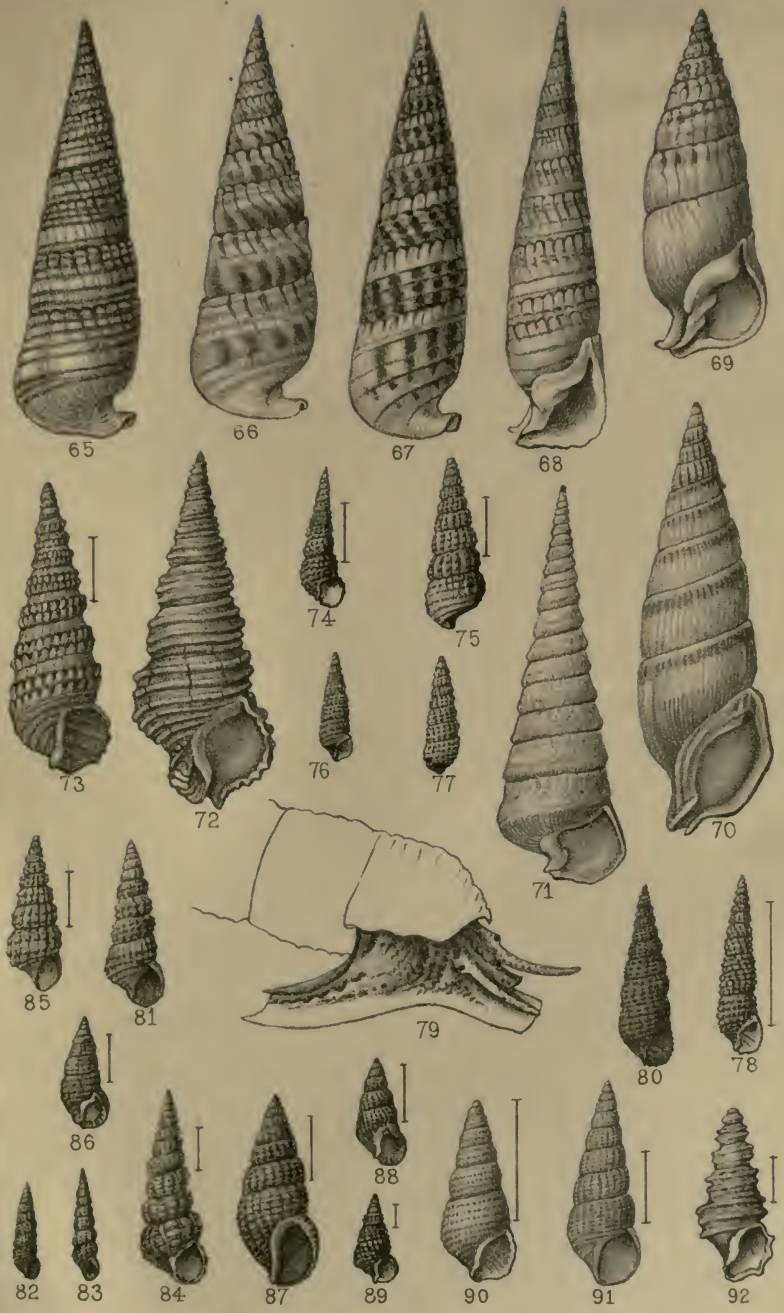
19
20
21
22
24
23
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
42
41
47
44
46
45
43

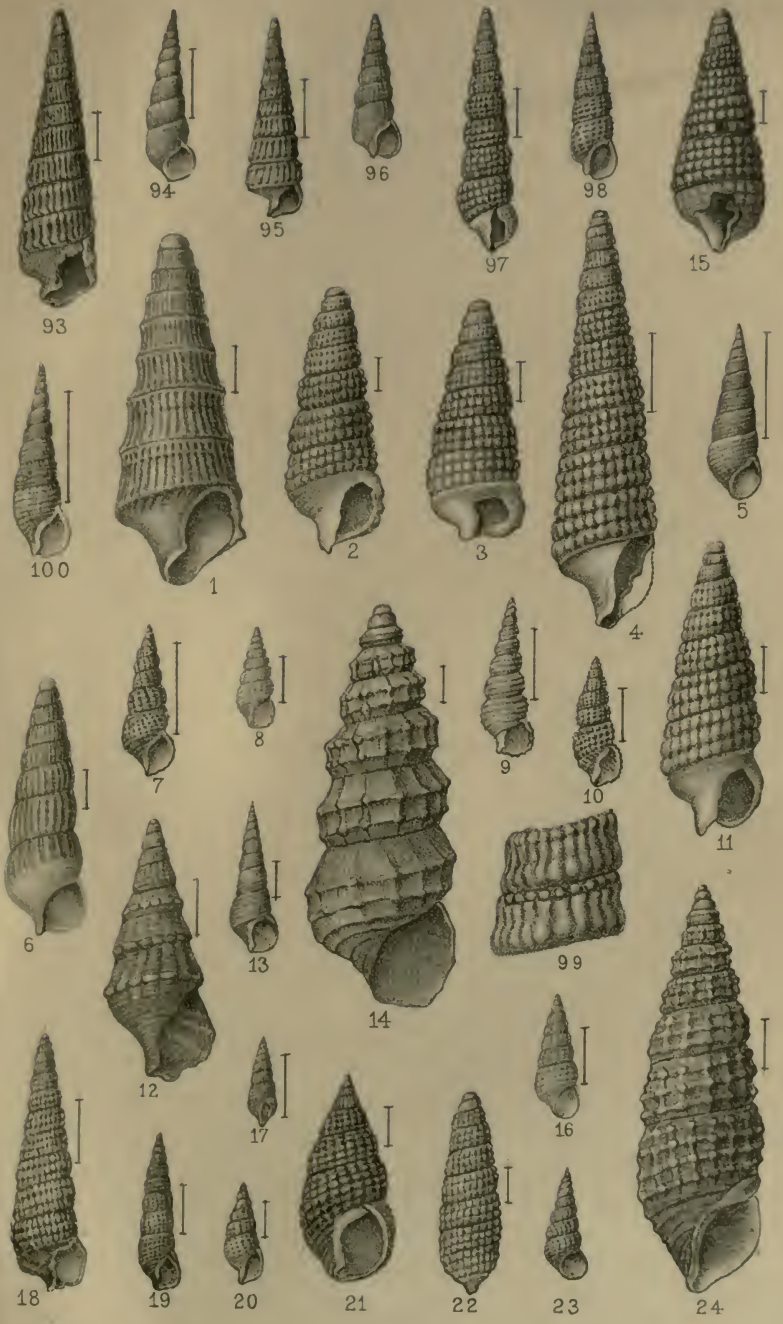
47
48
49
50
56
55
57
54
51
52
53
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74

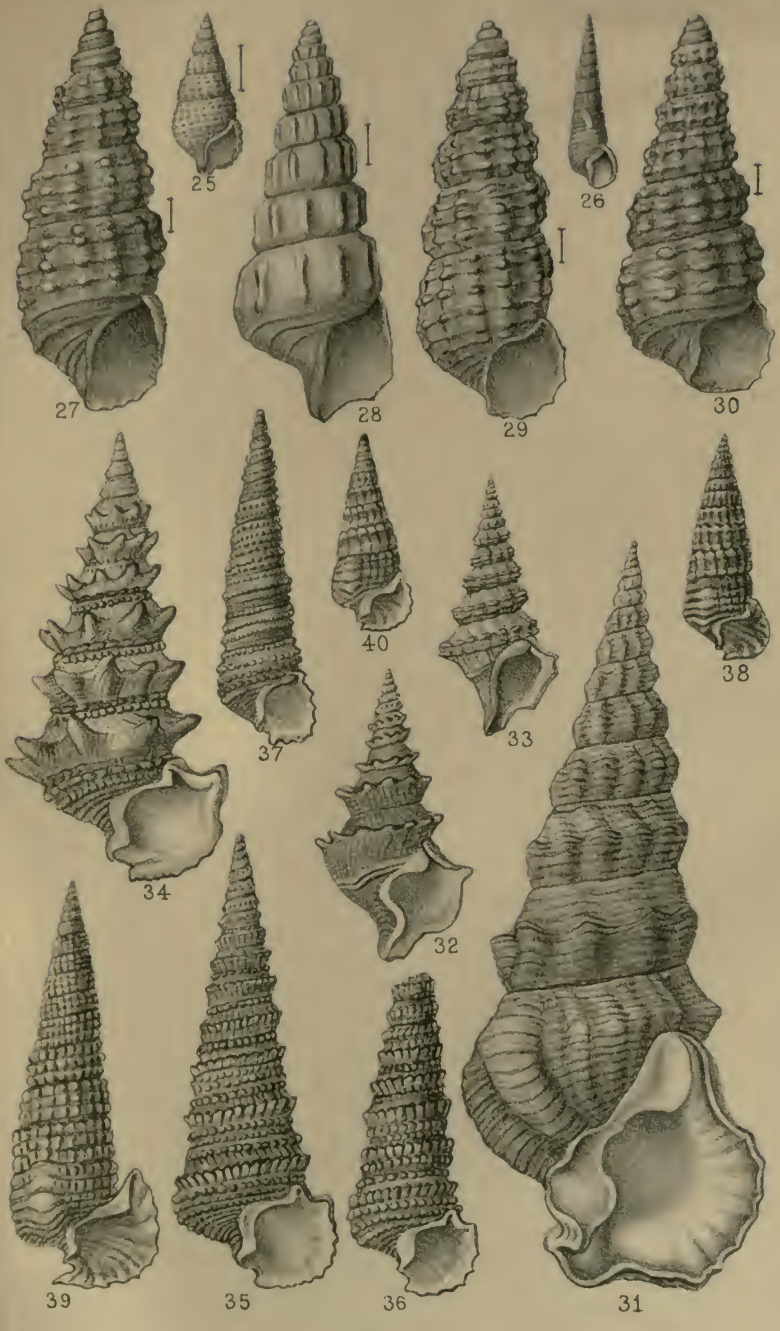
75
76
78
77
79
80
81
82
83
84
85
87
88
89
90
91
94
92
93
95
96
97
98
86
99
100
1
2
3
4
17
5
6
7
8
9
11
12
16
10
13
14
15

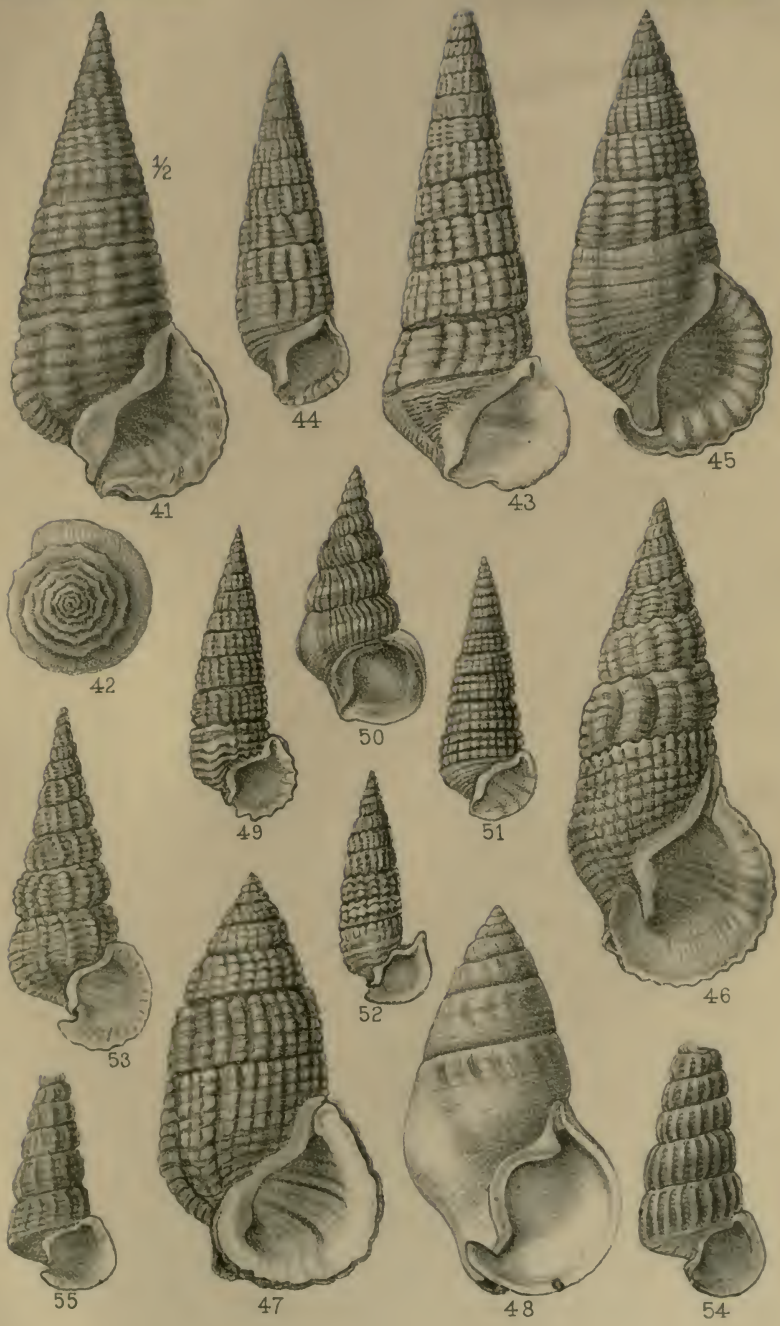
18
19
20
21
22
23
24
31
30
29
28
27
26
25
3/4
33
32
3/4
31
3/4
3/4
35
36
38
37
17a
43
40
42
39
41


45
44
46
48
49
47
53
52
57
58
50
51
56
59
54
55
62
63
61
64
60


65
66
67
68
69
73
72
74
75
76
77
71
70
85
81
79
80
78
86
82
83
84
87
88
89
90
91
92


93
94
95
96
97
98
15
100
1
2
3
4
5
6
7
8
9
10
11
12
13
14
99
16
17
18
19
20
21
22
23
24

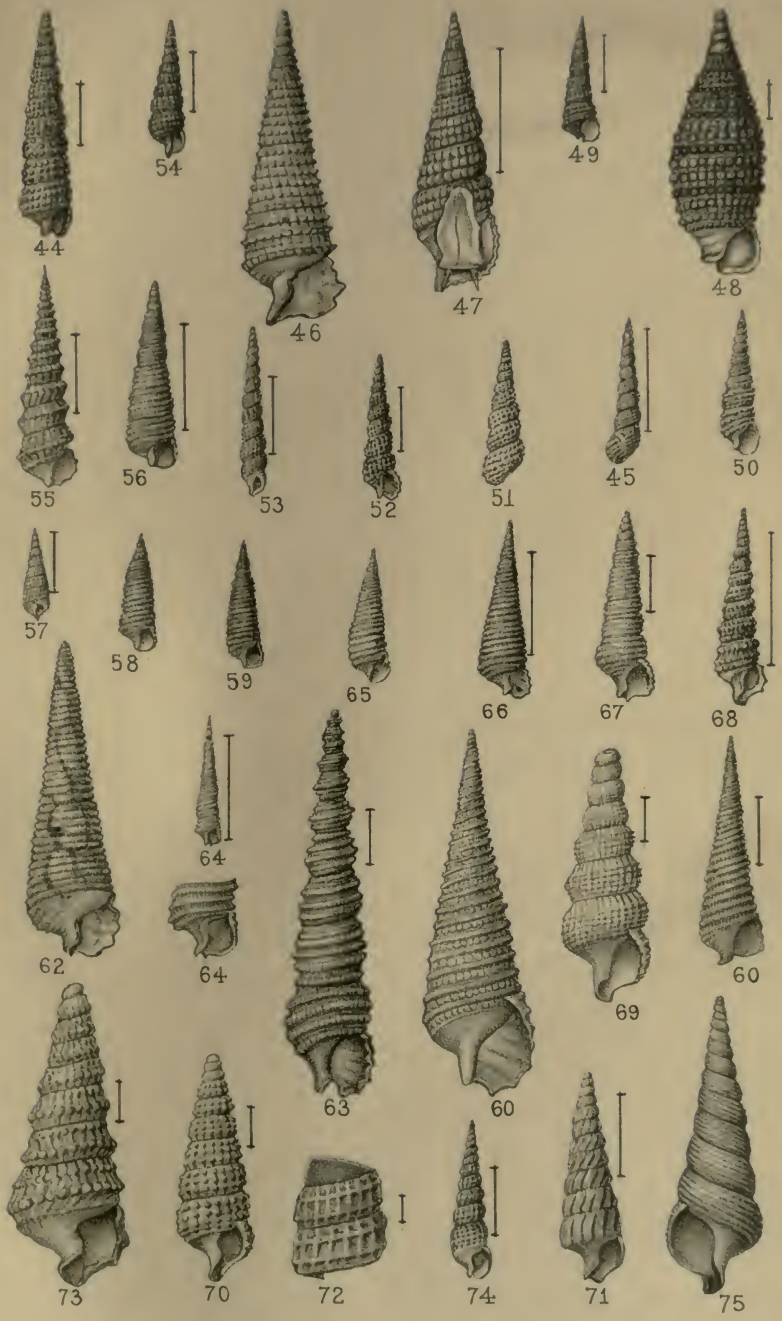

27
25
28
29
26
30
40
37
33
38
34
32
39
35
36
31

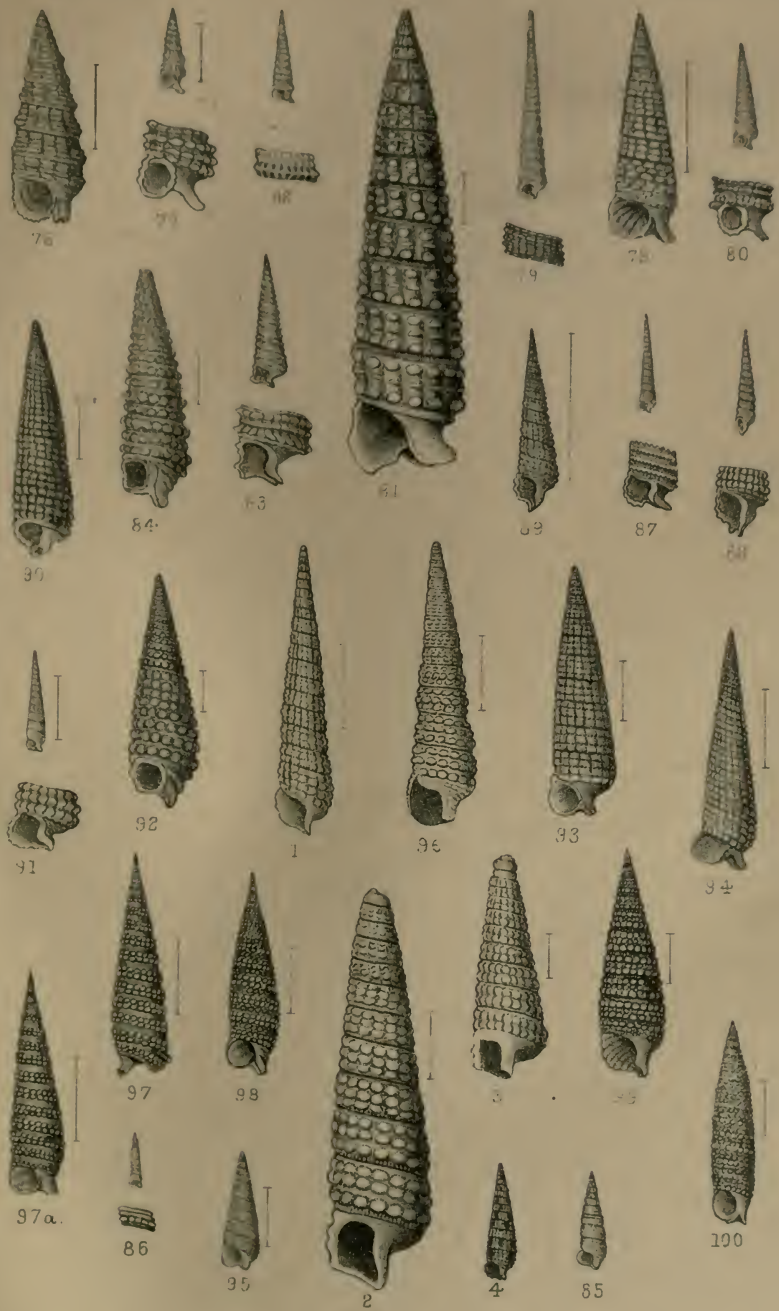

½
41
44
43
45
42
49
50
51
46
53
52
55
47
48
54

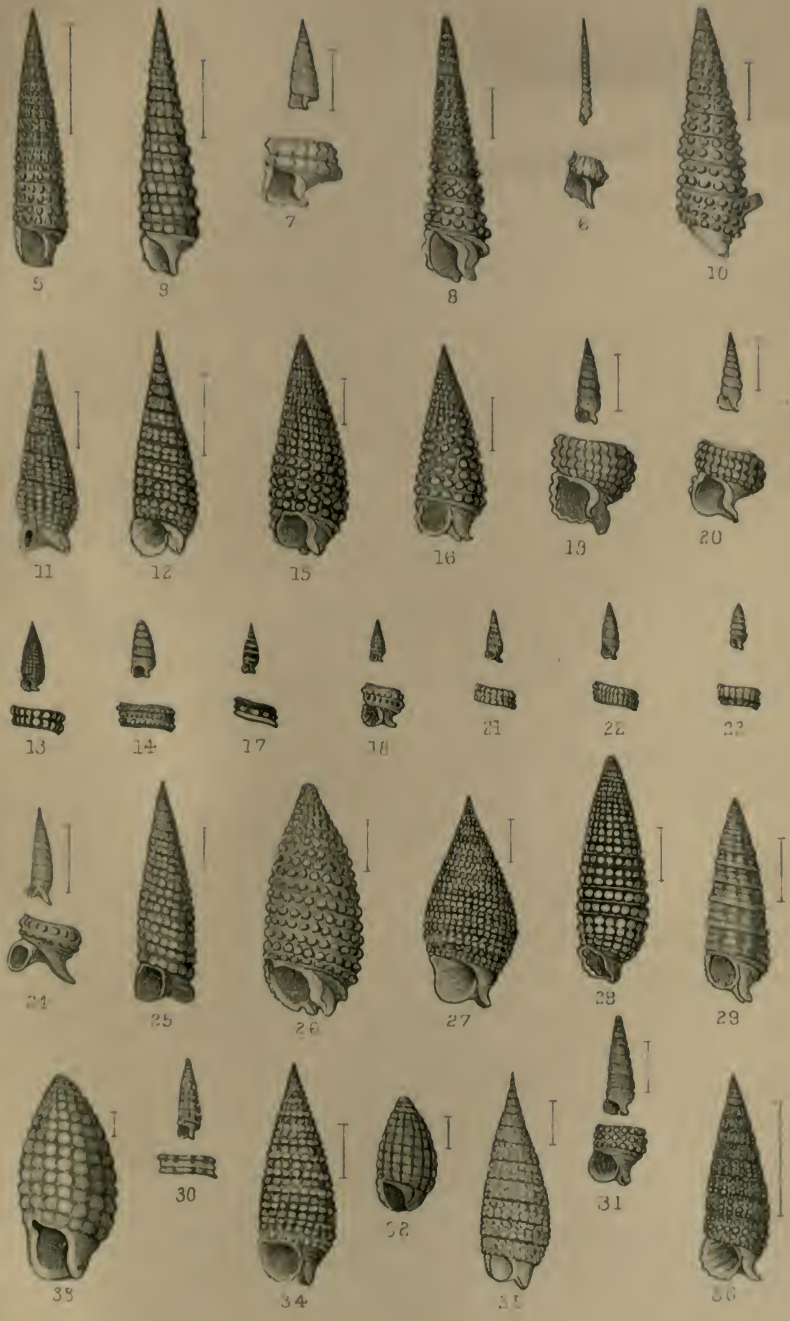
1/2
56
58
57
59
62
63
60
61
65
64
66
75
68
73
74
67
72
69
70
71
78
77
76

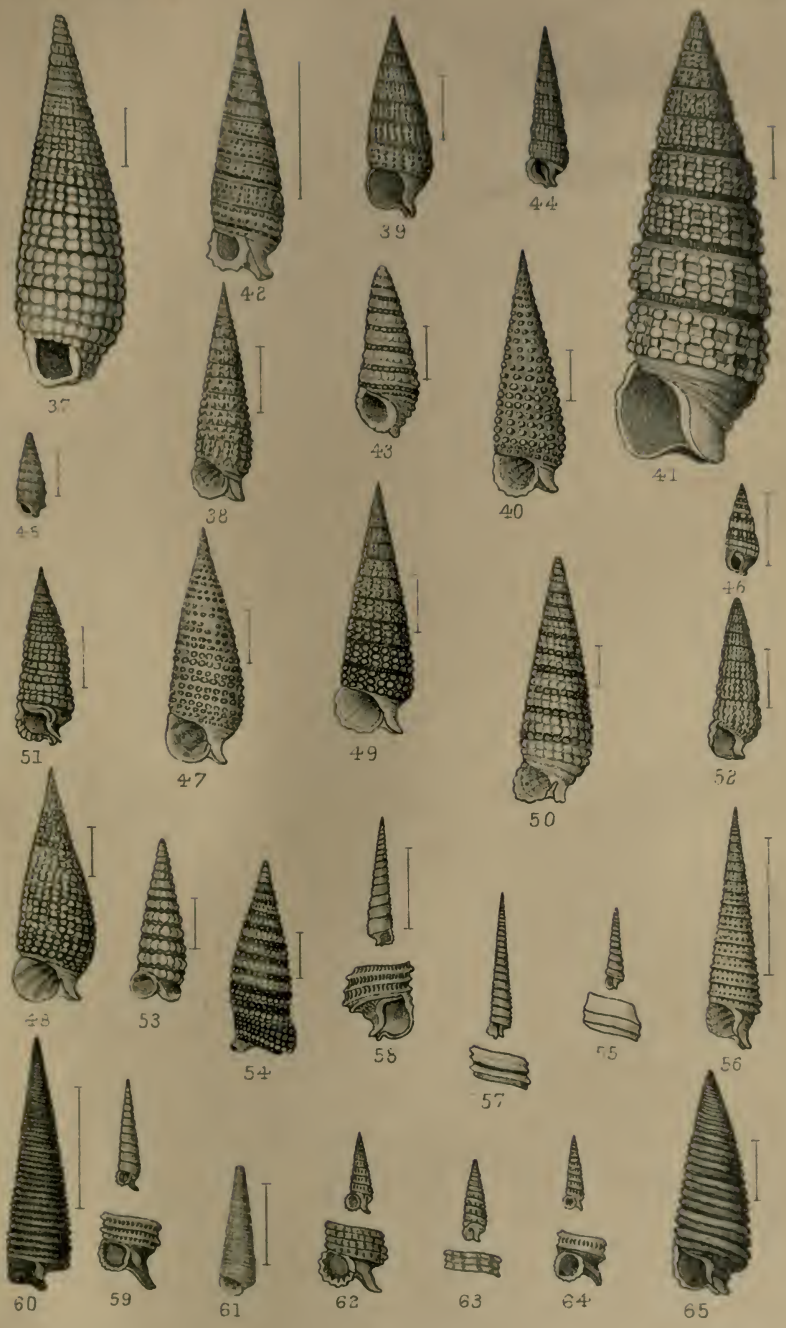
83
81
80
82
84
85
86
95
93
90
79
89
88
87
96
94
99
97
100
91
92
4
5
98
1
3
8
9
10
6
2
7
12
11

13
17
16
18
15
14
19
20
21
22
23
24
25
34
35
36
38
26
42
43
39
27
29
40
33
37
28
30
41
31
32

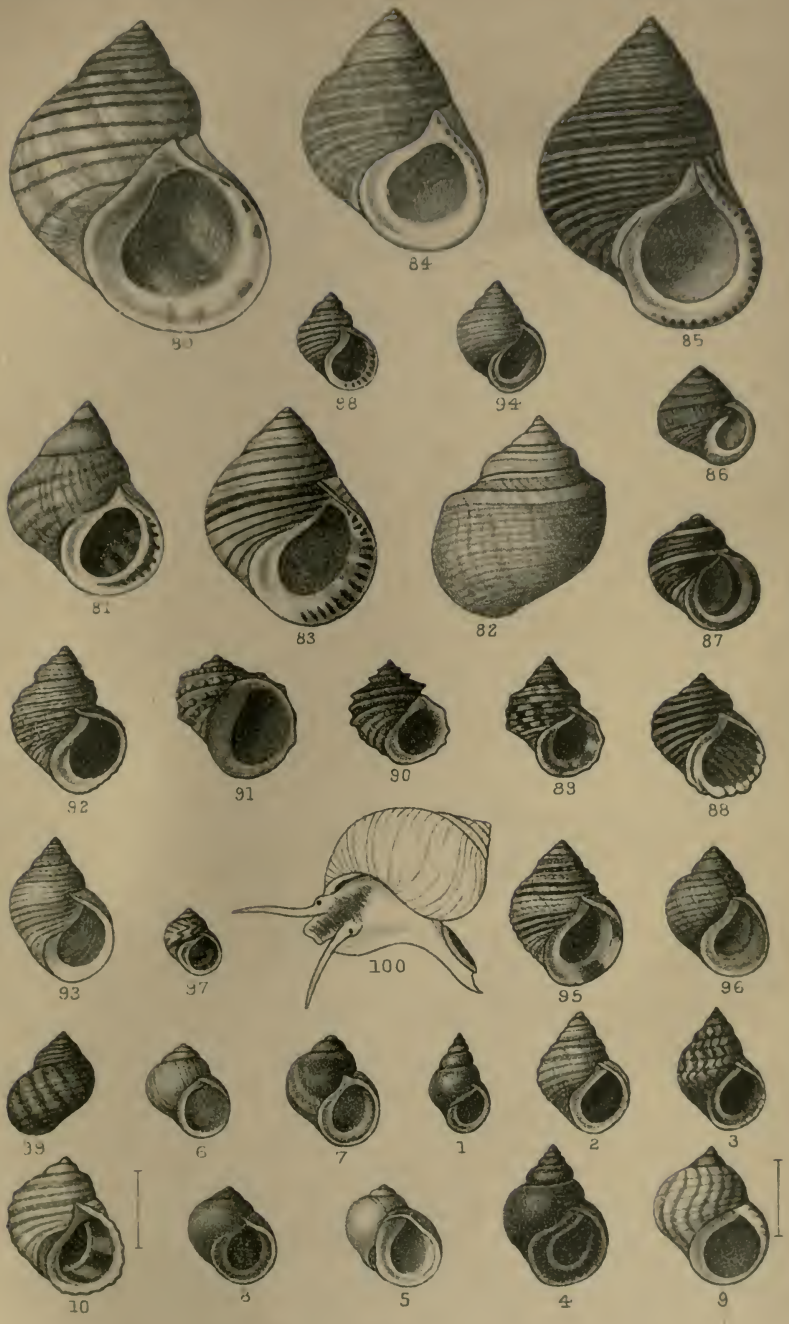

44
54
46
47
49
48
55
56
53
52
51
45
50
57
58
59
65
66
67
68
62
64
64
63
60
69
60
73
70
72
74
71
75


76
79
88
9
75
80
90
84
83
81
89
87
91
92
1
96
93
94
97
98
3
99
97a.
86
95
2
4
85
100


5
9
7
8
6
10
11
12
15
16
19
20
13
14
17
18
21
22
23
24
25
26
27
28
29
30
32
31
33
34
35
36


37
42
39
44
41
43
38
40
45
46
51
47
49
50
52
48
53
54
58
57
55
56
60
59
61
62
63
64
65

66
67
68
69
70
71
72
73
74
75
76
77
78
79


80
84
85
88
94
86
81
83
82
87
92
91
90
89
88
93
97
100
95
96
39
6
7
1
2
3
10
8
5
4
9

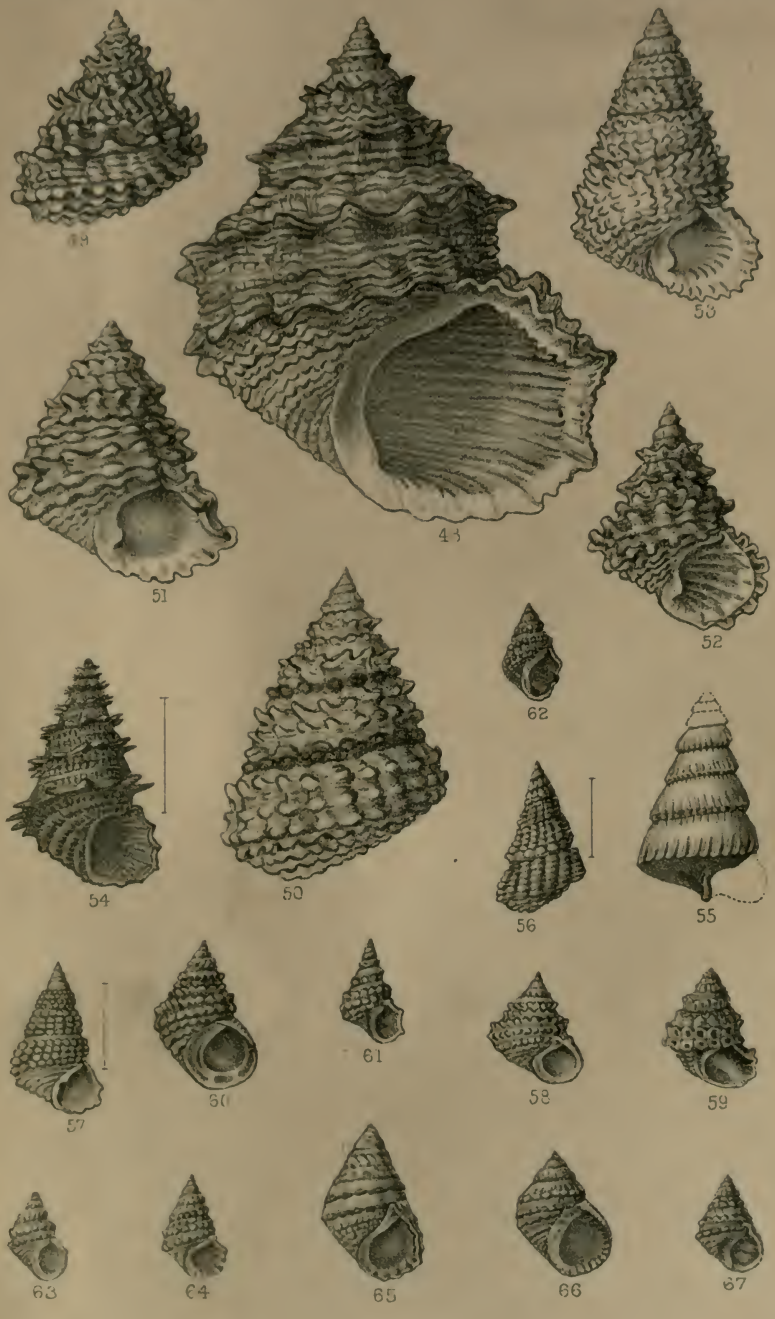
11
12
13
14
18
17
16
15
19
20
22
23
21
24
25
26
27
28
29
30

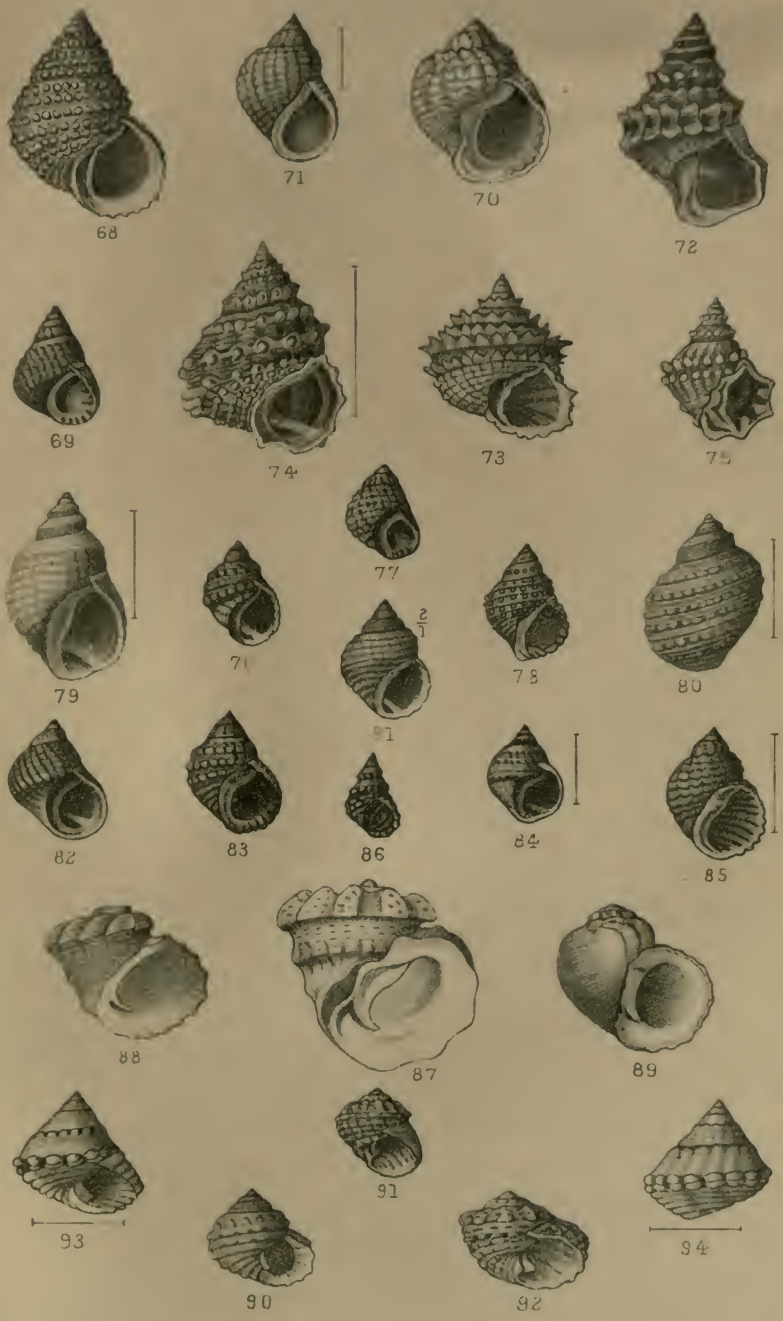
31
34
35
36
31a
32
38
39
37
40
44
42
33
46
45
43
49
47
48
41
55
56
51
52
50
53
54

57
58
59
60
61
64
62
63
65
66
67
69
70
71
68
72
73
74
76
75
77
78
81
79
80
82
85
83
86
84

87
88
89
90
91
92
95
98
97
96
99
1
3
4
2
100
5
7
8
9
6
10
12
11
13
14
16
15
17

20
22
19
18
21
27
25
24
26
28
29
31
23
38
30
34
32
36
33
35
37
42
41
39
40
47
43
44
45
46


49
53
51
48
52
62
54
50
56
55
57
60
61
58
59
63
64
65
66
67


68
71
70
72
69
74
73
75
77
79
78
80
82
83
86
84
85
88
87
89
93
91
94
90
92

98
95
96
97
99
1
3
4
5
100
6
8
9
7
10
11
12
13
14
16
17
15
26
27
18
19
22
23
28
29
24
25
20
21

29
30
31
36
37
41
42
51
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76

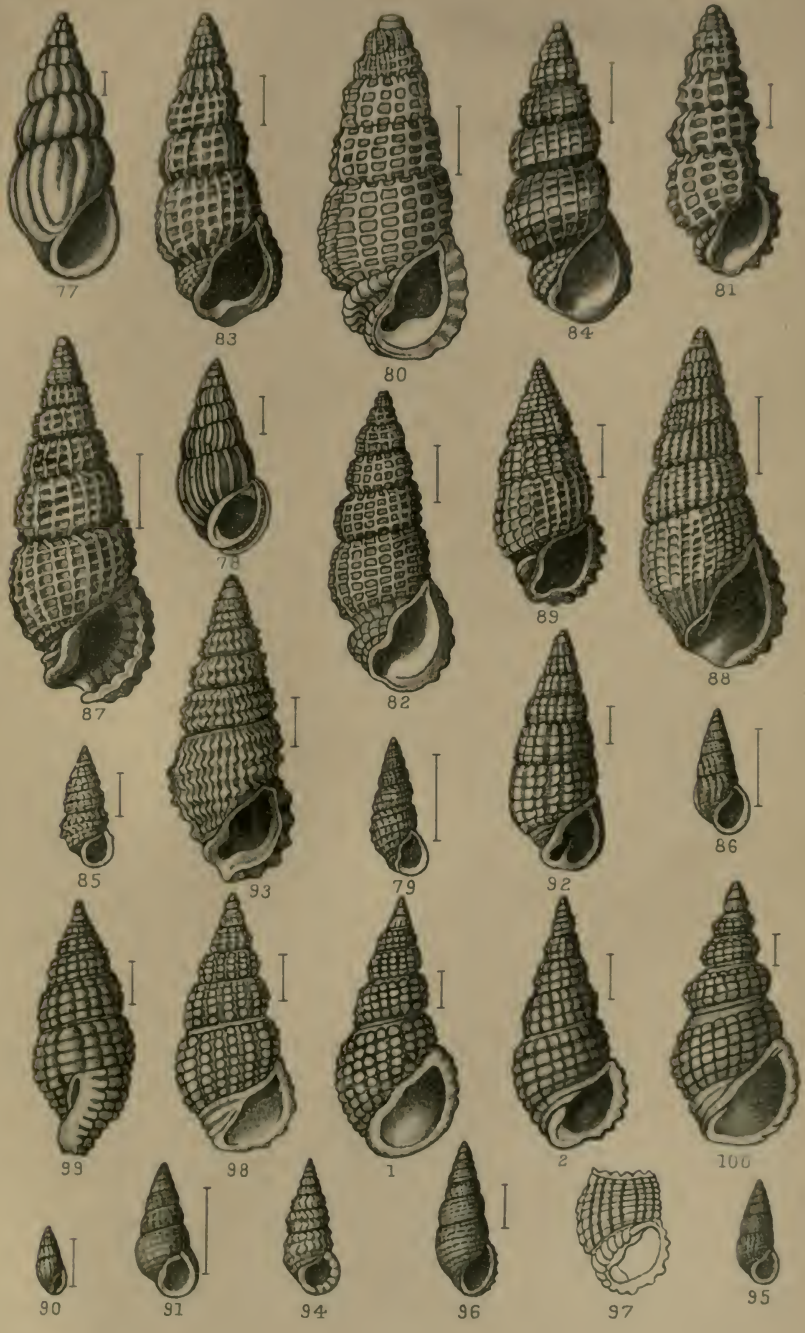
3
4
5
6
7
8
14
15
20
21
16
17
9
10
18
19
11
12
13
22
23
24
25
26
27
28
30
29
32
31
34
33
38
36
35
40
39
37
45
46
41
47
48
42
44
43

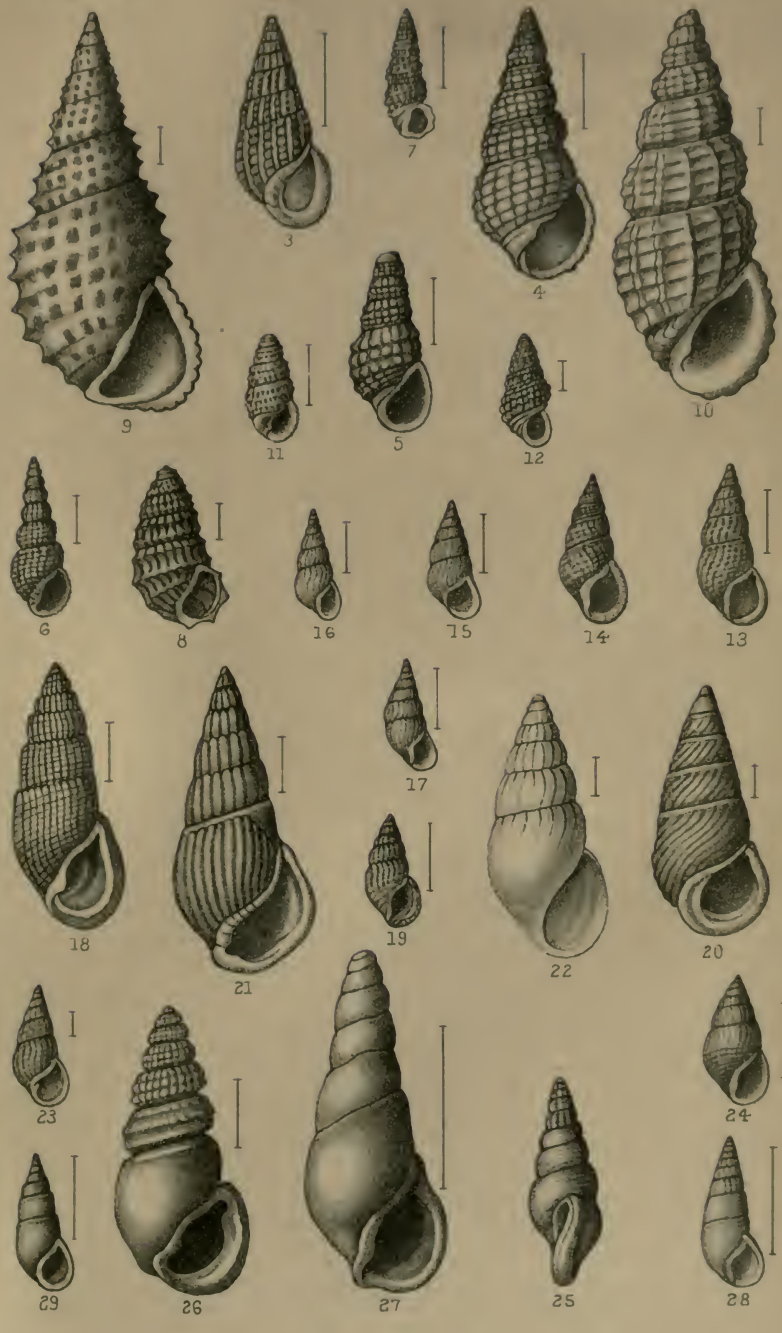
49
50
51
52
53
54
54
60
61
56
59
58
57
62
66
67
68
65
64
63
9
73
72
70
71
76
75
74
77
82
78
79
80
81
84
85
83
86
87
90
91
88
89
92

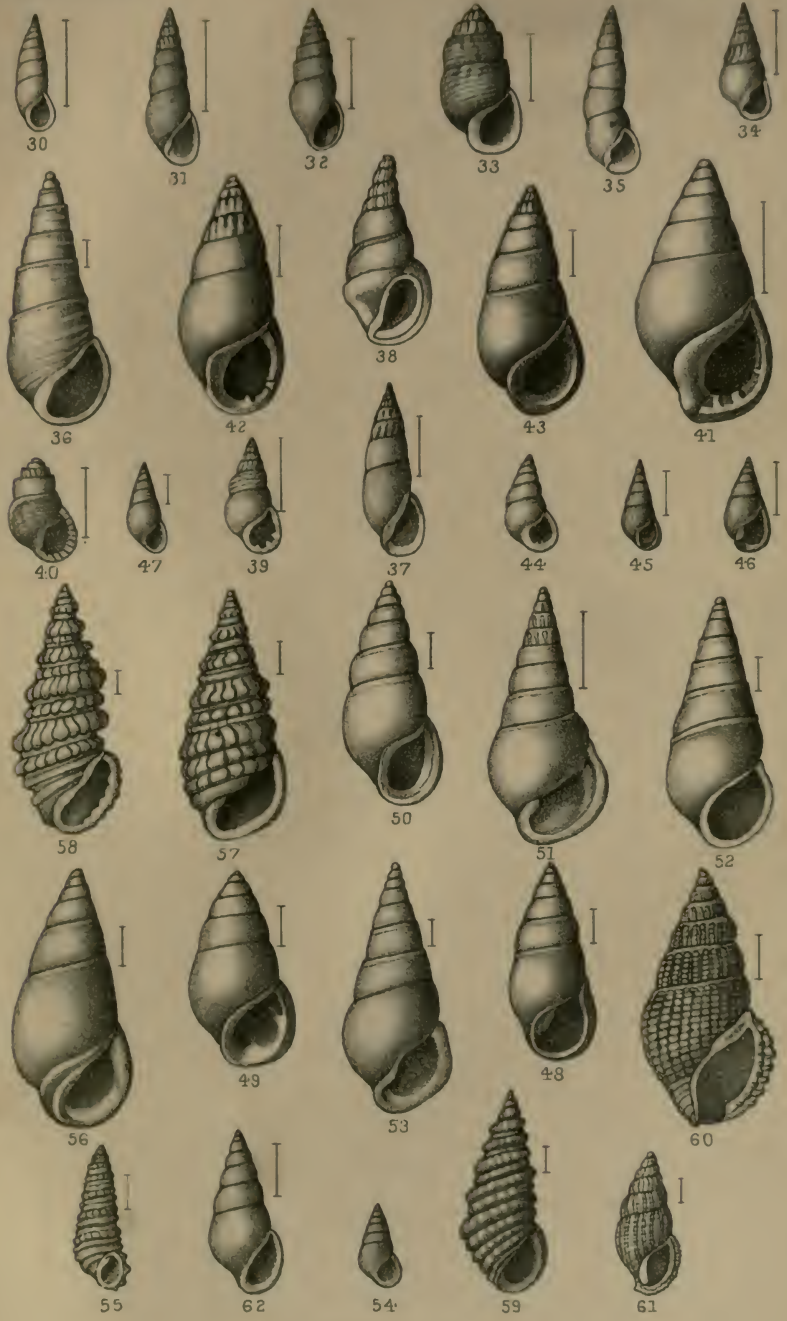
98
5
99
1
100
94
96
97
95
3
2
6
7
4
10
9
8
11
12
13
14

15
18
16
20
17
24
19
25
26
32
21
22
23
31
33
34
35
27
28
30
29
36
39
40
37
38
41
42

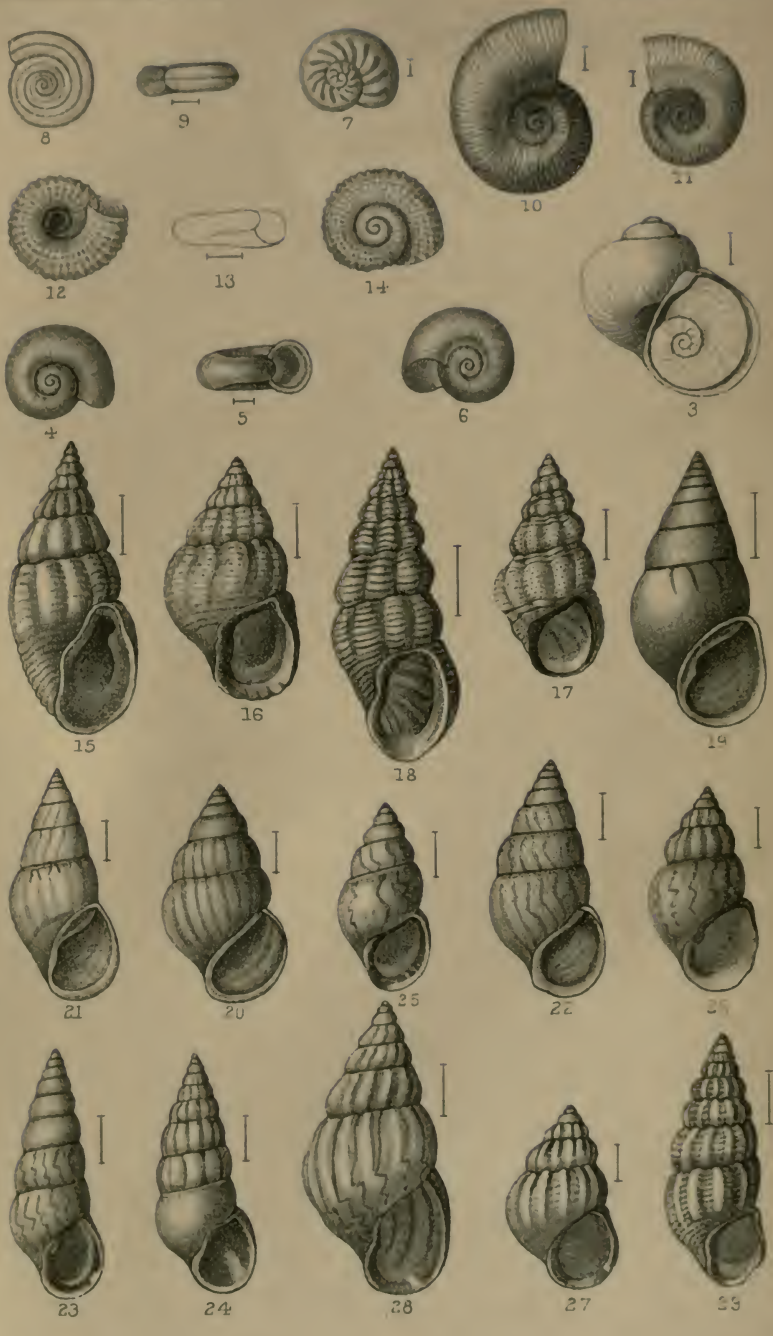
47
50
43
44
45
46
49
48
65
55
66
54
67
51
53
56
52
57
59
61
60
58
64
70
62
75
63
72
68
73
71
74
69
76


77
83
80
84
81
87
78
82
89
88
85
93
79
92
86
99
98
1
2
100
90
91
94
96
97
95


9
3
7
4
10
11
5
12
6
8
16
15
14
13
18
21
17
19
22
20
23
24
29
26
27
25
28


30
31
32
33
35
34
36
42
38
43
41
40
47
39
37
44
45
46
58
57
50
51
52
56
49
53
48
60
55
62
54
59
61

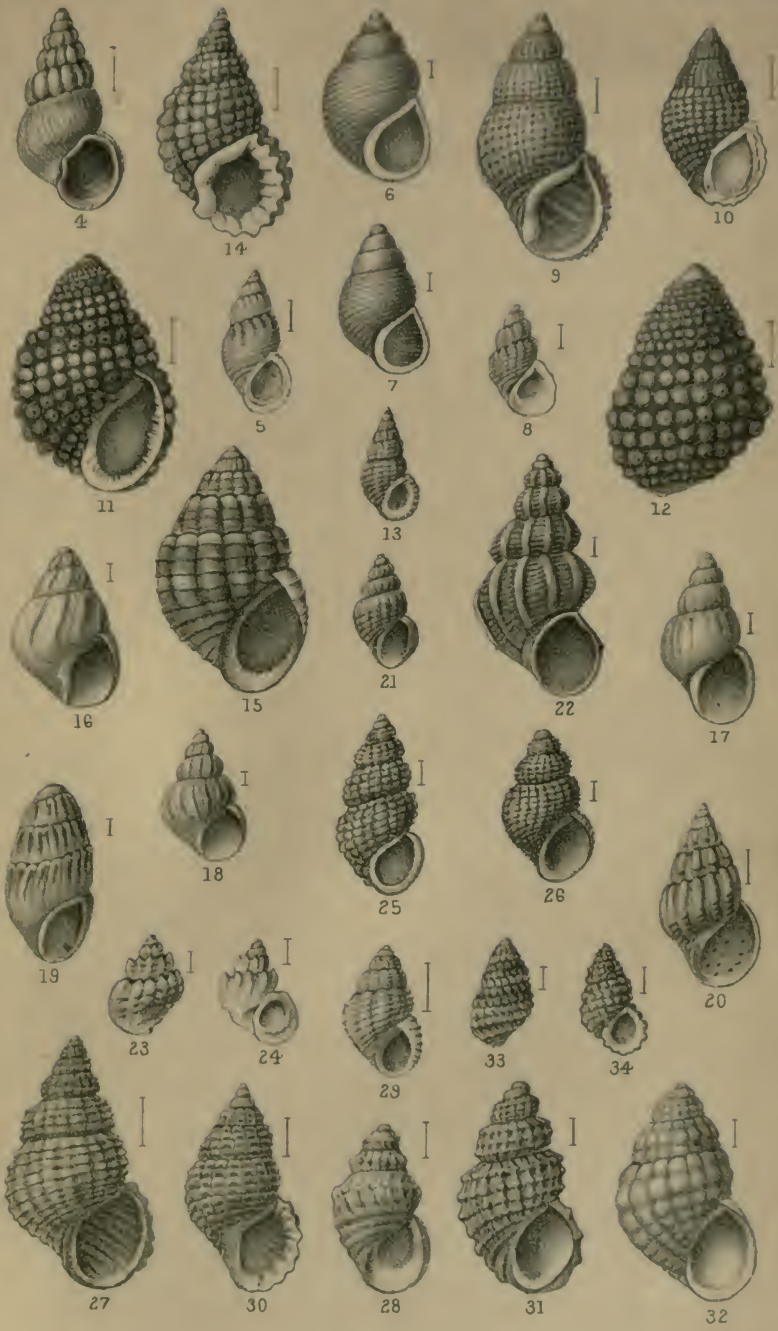
63
64
67
65
68
69
73
66
70
79
84
81
80
82
75
71
72
74
76
77
78
83
85
86
87
88
89
90
91
92
93
94
96
97
98
99
95
100
2
1


8
9
7
10
11
12
13
14
3
4
5
6
15
16
18
17
19
21
20
25
22
26
23
24
28
27
29

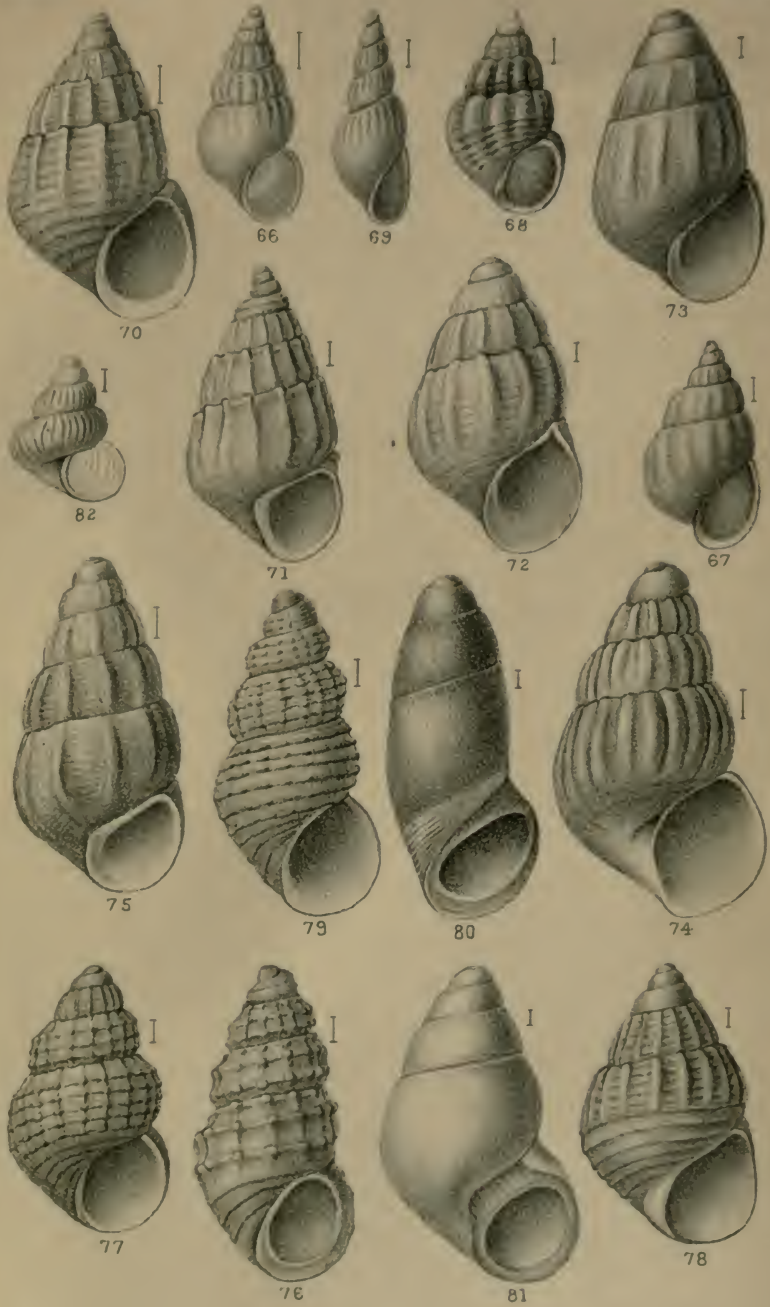
30
33
32
37
31
35
36
39
34
38
45
43
44
42
41
40
46
47
49
53
54
48
50
51
52

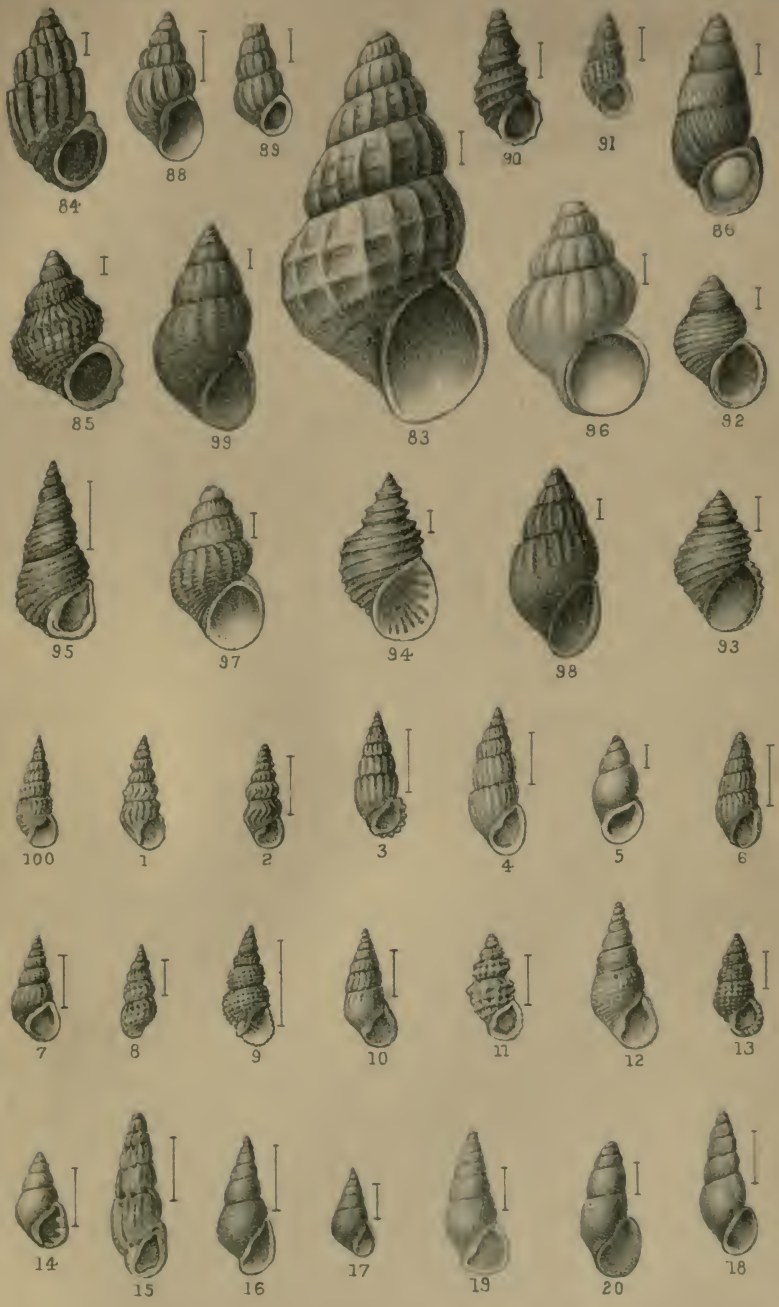
55
57
58
59
56
60
62
63
61
64
65
67
66
68
69
71
72
70
80
82
73
79
77
74
81
83
75
76
78
84
86
85

87
90
91
88
89
93
96
99
92
95
1
100
3
94
98
2
97

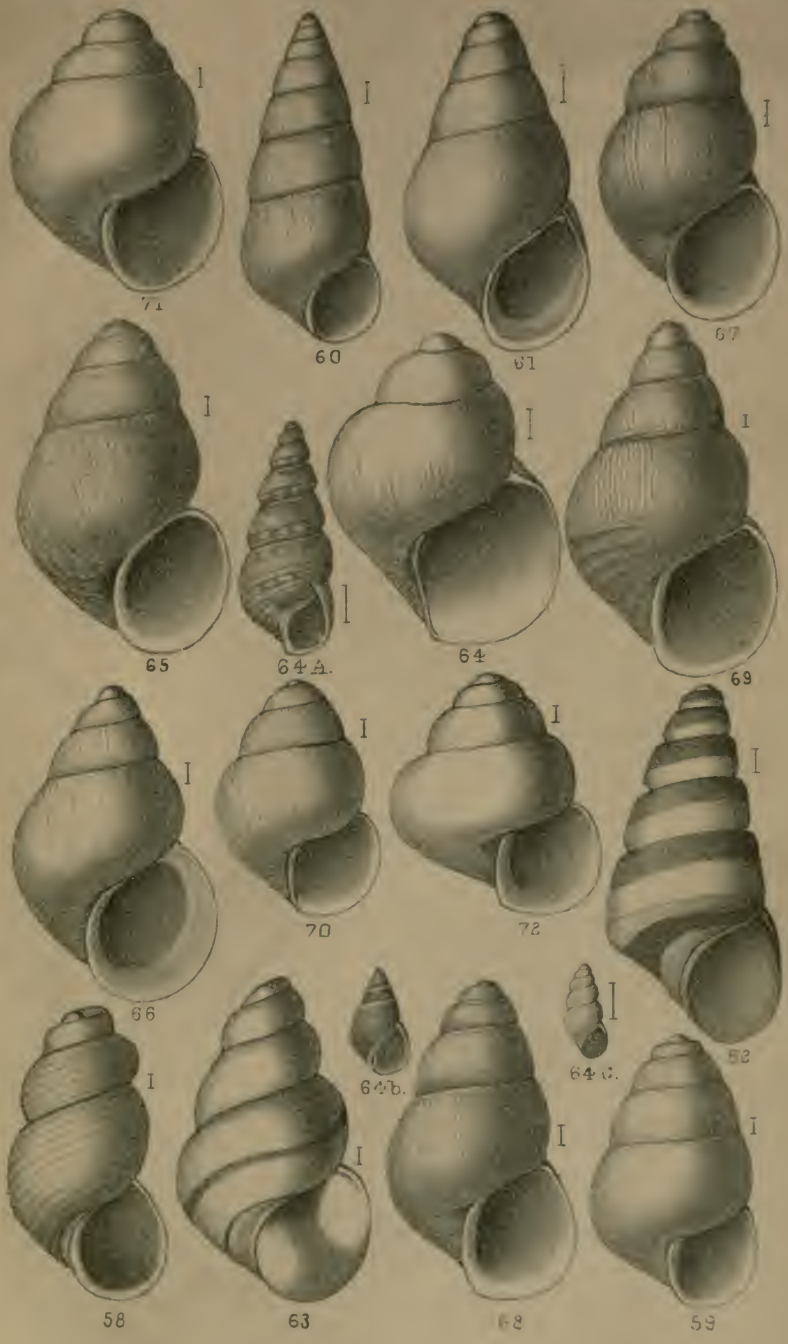

4
14
6
9
10
11
5
7
8
12
13
16
15
21
22
17
18
25
26
19
20
23
24
29
33
34
27
30
28
31
32

37
38
36
35
39
40
44
45
41
42
43
48
49
46
47
50
59
52
51
55
53
54
61
60
56
62
57
58


70
66
69
68
73
82
71
72
67
75
79
80
74
77
76
81
78


84
88
89
83
90
91
86
85
99
96
92
95
97
94
98
93
100
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
19
20
18

21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
39
40
41
42
38
43
45
46
47
48
44
49
50
52
51
55
56
54
57
53


71
60
61
67
65
64A.
64
69
66
70
72
52
64b.
64c.
58
63
68
59

73
74
76
81
75
80
78
77
82
85
83
79
91
92
83
84
86
87
88
97
96
98
90
94
95
89
100
2
1
3
4
5
6
7
8
99
9
10
11

144390
Zool.
Mollusca
T.
Author Tryon, G. W. and Pilsbry, H. A.
Title Manual of conchology. Ser. I. Vol. 9
University of Toronto
Library
DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET
Acme Library Card Pocket
Under Pat. "Ref. Index File"
Made by LIBRARY BUREAU